

Lolita Nikolova, Marco Merlini, Alexandra Comşa (Eds.)

Western-Pontic Culture Ambience and Pattern: In Memory of Eugen Comşa

Lolita Nikolova, Marco Merlini,
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In Memory of Eugen Comşa

Managing Editor: Katarzyna Michalak

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Prologue

This volume is a collection of selected contributions especially submitted for this volume, as well contributions from the 13th Annual Meeting of the European Association of Archaeologists in Zadar (2007).

Western Pontic cultures have been an integral part of different macro-cultural regions, particularly of Circumpontica. The original conception of a prehistoric Circumpontica (the Circumpontic region or the region around the Black Sea in Central Eurasia) may be traced to the works of Evgenij Chernykh and his collaborators who argued that in the pre-Bronze prehistoric epochs, interactions existed between communities around the Black Sea. Despite the lack of evidence of a unified network, during the Bronze Age there was a unification of metallurgy and many other components of the prehistoric cultures. The core of this concept remains central to the theory and history of early Eurasia, even if essential updates and new approaches have helped researchers to better grasp the prehistoric cultural processes.

On the whole, since the 1970s, the thematic scope of prehistoric Western Pontica has greatly increased. There are special institutions like The Center for the Black Sea Archaeology at the Halle University, Germany, devoted to the archaeology of Circumpontica, as well as specialized periodicals devoted to the archaeology and history of Eurasia, in which the regions around the Black Sea are the focus of scholarly research.

Because of the continuing importance of this scope of research, it is essential to point to the primary significance of the Black Sea in Prehistory for the development of the idea of global culture. In light of the most recent evidence and theoretical contributions it can be insisted that Bronze Age Circumpontica was in fact an element of the Eurasian chain of interdependable and interactive cultures. One typical instance is the Eurasian gold horizon from the third millennium cal BC.

Last but not least, by systematically researching the prehistoric Western Pontic region, we are truly studying the roots of many components of our contemporary culture (the household, multi-scaled social organizations, the accumulation and reproduction of wealth, the social hierarchy, religion, spiritual culture, entertainment, etc.). The resulting insights inform us as anthropologists, and through these we may presumably guide society more profoundly.

Eugen Comşa was the prehistorian whose work created the foundation of the north Balkan prehistory and has been seminal for the contemporary view on prehistoric Northwest Pontica. From the classic archaeological point of view that recognizes the importance of good stratigraphy and preservation of the finds as essential for excellent work, Eugen Comşa was more than an excellent archaeologist. It can be even insisted that his archaeological results are extraordinary because all of his conclusions are based on an honest approach to the archaeological past and because he always followed the scientific method. As is only appropriate, this volume is dedicated to the memory of this great Romanian archaeologist.

Prominent and young authors have been included in this volume; these authors represent only some of the current developments in archaeology (discovery, contextual analysis, cross-cultural analysis, interpretations, theory, etc.) as a humanistic discipline in the 21st century. Many other directions the discipline has taken, like statistical analyses with strong cultural conclusions and critical historiographic approaches (beyond Lazarovici-Merlini approach in this volume), are still waiting for their researchers. This group of authors was selected by editors completely committed to diversity and their decision was made solely on the basis of the first author listed in each group.

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June 29, 2015

Acknowledgments and Editorial Remarks

First of all, the authors and editors wish to thank De Gruyter Open for the opportunity to publish this collection of research papers as an Open Access publication. Their understanding is that the science of 21st century should be developed as most democratic open access exchange of knowledge. We extend our special acknowledgements to all authors who participated and together we express our gratitude to prominent Romanian archaeologist Eugen Comşa whose 85th Birth Anniversary we celebrated globally in September 2008 and who recently passed away (November 7th, 2008).

It is important to note that the authors in this book belong to different academic traditions. Both the authors and editors are indebted to the editors of the English text of the translated articles who worked very hard to ensure that the book met publication standards.

Last but not least, in the current era of Internet publishing, we believe that the selected contributions have the quality to be presented in the format of academic research papers. The contents of this volume are offered as contributions to the scholarship of academics and students who seek a deeper understanding of the Western Pontic region, in particular the Balkans in their Eurasian context and more broadly to enhance the scholarly collections of academic, educational, public and private libraries throughout the world. This book continues in the traditions of *The Balkans in Later Prehistory*, by Lolita Nikolova, with contributions of Igor Manzura and Cristian Schuster (BAR International Series No. 791, 1999), *Technology, Style and Society*, edited by Lolita Nikolova (BAR International Series No. 854, 2000) and *Early Symbolic Systems for Communication*, edited by Lolita Nikolova (BAR International Series No. 1139, 2003).

The editors are pleased to acknowledge that all original texts were submitted according to the contemporary requirements of academic ethics, so that no ethical issues have been raised. In the case of any conflict of interests or other ethical problems, please contact the editors.

Introduction. Eugen Comşa



Eugen Comşa during the International Congress of Anthropology and Ethnology, in Tokyo-Kyoto, 1968.

My Father

As I am the daughter of Eugen Comşa, some people might assume that the following lines will reflect a subjective view of my father. Even so, I take the risk and state that my father was not only a very good specialist in his field, but he was also a wonderful person.

How could someone describe a lifetime within a few words without including a summary of the most important events that happened? As my father had never had

such intention, or opportunity, I will do it myself, considering that his scientific and personal life were intertwined in a most interesting way.

He was born on October 20, 1923, the only son in his family. According to the stories told by people who met them, his parents were nice, decent and honorable people. He was raised surrounded by the great love of his parents, spending the wonderful years of his childhood with his friend, Colea (whom is his friend even today, after 80 years), wandering the environs of Chişinău, his native town, which was at that time, a part of Romania. But, those years have passed rather quickly and as a young man, he studied at the high school “Alexandru Donici” from Chişinău.

During World War II, through various circumstances, he lost his father and later his mother and was cared for by his grandmother. He eventually joined the war and this is why today he is a war veteran. At the end of the ordeal, he graduated high school in Bucharest, where his family initially took refuge, at the today National College “Cantemir Vodă”. Afterwards, he was admitted at the University of Bucharest-Faculty of History, where he became one of the faculty’s most promising students. He was also fortunate enough to have prominent personalities as teachers.

We could mention here Ion Nestor and Gheorghe Ştefan. During his student life, he had eagerly learned and worked on the excavation sites, trying to achieve the best possible knowledge of the field of archaeology. This is probably the reason why he was chosen by Prof. Ion Nestor to be his assistant at the Chair of History after he graduated. He worked there for few years, but was replaced, along with his master and many others in 1952, due a debatable decision. I have no detailed information about that but I know that my father is even now gifted as a professor. He is a man who is able to spend a lot of time explaining the evolution of phenomena or other important things; he is comprehensive not only to the specialists but also to novices. He is able to do all of this without losing his temper. For those eager to listen, he was involved and passionate when he spoke about archaeological matters. For those who did not talk to him on this topic, he was almost silent. He told me that his models as specialists were Ion Nestor and Mircea Petrescu-Dâmboviţa and that these were also the archaeologists who taught him a lot of the archaeology secrets. During the 1950s, probably before one of the archaeological campaigns from Garvan, he met my mother, also an archaeologist and, in 1955, they were married. In 1959 my sister Delia was born, and I, Alexandra, followed in 1963. We were a very happy family and we tried to spend as much time together as we could. This is why our parents took us, as children, with them to most of their excavation sites. We were fascinated by the objects found in the earth and whenever we were allowed we were glad to give a helping hand for washing or wrapping them. Our holidays always partially consisted in such experiences. Yet, later on after beginning high school, my sister and I were unable to join them anymore and, truthfully speaking, we were not as interested as we had been when we were younger.

Yet, we missed both of them, especially when they would leave Bucharest for a few months. At that time, in most of the villages the telephone was a luxury so

we were glad even when we could talk to them once a week. In time other troubles appeared, as well. There was no proper transportation, or the living conditions were quite poor so we had a lot of things to worry about. In some villages where my parents worked, there was not even a doctor.

After high school, my sister attended the Academy of Economic Sciences-Bucharest, whence she graduated. For some time following her studies, she worked in the Institute of National Economy-Bucharest and later at the private Ecological University-Bucharest, at the Management Chair. In the meantime she was married to Bogdan and had a daughter, Ana.

I graduated from the University of Bucharest-Faculty of Biology and later specialized in Iaşi as an anthropologist. Both, my sister and I prepared and graduated as PhD candidates, my sister in economical sciences and myself in physical anthropology. Some have said that it is rare to have four doctors in one single family, but ours had.

And here the story takes a turn for the worse. In 1991, my parents were notified that they had to retire. Everything happened very fast, without any prior notice. After working for about 55 years in the same professional position, one that was more appropriate for a young and newly trained specialist, they retired and went to pension. Still, considering the results and prestige of their research, they were allowed to continue their work at the Institute and they did so, being happy to return as volunteers to their usual activities. But as it happened, this was just only the first and simplest of their troubles. The pleasant atmosphere of our family fell under a shadow when my mother unexpectedly died after a heart attack in 2002 and it completely disappeared in 2003 when my sister passed away from breast cancer, living behind not only her daughter and husband, but also my father and me. Since that time, both my father and I became increasingly detached from the surrounding world and we could hardly concentrate upon our daily activities. We were fortunate enough to have beside us not only our remaining family, but also people who were supportive and helped us to recover.

Now that my father also passed away, I cannot say that my wounds will heal soon, although memories of my family and the friendship of my colleagues encourages me and gives meaning to my life as an archaeologist-physical anthropologist.

Alexandra Comşa

Memories about Eugen Comşa

Childhood Memories about Eugen Comşa

I spent my childhood and youth in former Bessarabia (more precisely in Chişinău) where I lived with my parents until 1941 when we took refuge in Craiova.

My both parents, but mostly my mother, had a very close relationship with George Comşa's family, whom she visited very often. On those occasions, my brother Alexei (Leoncic) and I used to spend most of our time with Jenea (Eugen), who was one year older than I.

I remember that Jenea was attracted to archaeology because, during our trips while we explored the hills around Chişinău, he used to gather all kinds of burnt ceramic fragments. He "studied" them and arranged them according to "his science".

When we returned from our trips to the hills of Rîşcani (Rîşcanova), Jenea would have his pockets full of burnt ceramic fragments and his grandmother would chastise him for bringing home "stones" again which, rather often, she used to throw away - without his knowledge, of course.

A certain detail I should mention here is that as we prepared for our trips, my brother Leoncic, always wanted to join us. He followed us crying because we did not want to take him with us. He was 5 or 6 years old and he was much too young for our "missions".

I seldom saw Jenea's parents, because they were very busy at the office, working most of the day. I remember that Jenea's mother was a distinguished and beautiful lady who was elegantly dressed and had good taste. His father was also a very handsome and distinguished man, temperate and a good family man.

Jenea's grandmother often convinced me to serve lunch to him because she said that when we ate together it was a way to make him eat better.

All this happened before we went to school. After we began school we rarely saw each other because he studied in one school, while I studied in another. I made some friends at school and he had his own friends among his schoolmates, but we never forgot our friendship.

And after that, during our first years of high school, when Jenea studied at the "Alexandru Donici" High School, we rarely saw one another because both of us were very busy with our homework.

Everything continued pleasantly in this way until 1940 when, after the Ribbentrop-Molotov pact, my family and I remained in Chişinău, under the Russian occupation, while Eugen and his family took refuge in Bucharest.

We met again after those hard times and we have remained friends until today.

N. A.

Remembering about Eugen Comşa

We met 63 years ago, in 1945, when we were colleagues at the University of Bucharest-Faculty of History. Even then, at the beginning of our studies, the two of us were a part of a team that undertook the excavations carried out in the site from Sărata Monteoru, on the spot "Cetăţuia" (E. Comşa, Didi Alexandrescu and one more student whose name I cannot remember and who later retired and I).

In the beginning, at Monteoru, Didi and I would often reserve a few ceramic fragments but after we observed that E. Comşa gathered everything he discovered, this inspired us to return ours also back to the collection.

In 1949, E. Comşa studied the stratigraphy on the necropolis Monteoru III, surface M, on the hill called “Dealul Leagănului” (Swing Hill).

He worked in Romanian Moldova on different archaeological sites; the one from Corlăteni where he initially worked with Didi Alexandrescu and I came later.

He was one of the most organized and orderly of the Romanian archaeologists. He always made a correct and complete analysis and interpretation of his studies. It was impossible to argue with his conclusions because he preserved everything which could be relevant. It is my opinion that the correct registration is a crucial component of this science.

It was impossible not to notice his commitment because he was informed on every aspect of the location and dates of his excavations. He knew everything relevant concerning these projects.

On the other hand, it was fortunate for him that the time that he began his work in this field was a time of intense archaeological studies, when substantial financing existed and made extensive archaeological excavations possible. At that time, stratigraphic control excavations could be done, and were thus being checked. One of these projects, for instance, were the penetrations of Cucuteni bearers in the area of Gumelnița Neolithic of Muntenia (southern Carpathians area).

Concerning the Neolithic, he based his work upon studies from Băești-Aldeni, Radovanu and Cernica.

Another feature of his scholarship which is worth mentioning, was his devotion to field work. No other archaeologist had ever excavated as much as he did. This fact is very important because, in order to study a certain material culture, it is necessary to trace the locations where it is present. Therefore, at least hypothetically, he was able to establish the limits of that culture.

After Cezar Bolliac and Gh. Ștefan, D. V. Rosetti and R. Vulpe, he is the archaeologist from the generation which followed the World War II who completed the most surface investigations. None of our colleagues ever “wondered” as much as he did. He not only found a large number of archaeological sites-including Cățelu, Greaca, Feldioara, Luncavița-but he also discovered and characterized the Dudești culture.

Compared to his other colleagues who were not willing to collaborate, he was always available to his fellow archaeologist colleagues or pupils and found the time to offer explanations and have pertinent discussions. This is an element of cultural propaganda which is extremely important for the impact of our work. In fact, this is a way of gaining the respect of the community and a way to education for lay persons on this field of study.

In every way, my description is intended to describe his activities as those of a scientist, preoccupied by his work.

Even if, for some we, the scientists, are out of fashion, we consider that stratigraphy, chronology and typology themselves will never be out of fashion.

E. Z.



Eugen Comşa with Maria at Garvan (before their marriage in 1955).



Eugen Comşa at the archaeological site from Vărăşti (1956).

Short Biography of Eugen Comşa

Eugen Comşa was born on October 20th, 1923 in Chişinău, the capital of Republic of Moldova. He was a citizen of Romania where he lived for his entire life. After elementary school, he attended the High School “Alexandru Doinici” in Chişinău. In 1940 he moved with his family to Bucharest as a refugee and graduated from the High School “Cantemir Vodă”.

In 1944-1945 Eugen Comşa was a war veteran. He participated in the Second World War as a student at the Military School for Reserve Officers (Slănic Prahova).

In 1945 he applied at the Faculty of History at the University of Bucharest, where he had the opportunity to study under prominent professors I. Nestor, C. Giurescu, C. Marinescu and Gh. Ştefan.

In 1946 Comşa became a librarian at the Prehistory Seminar of the Faculty. He graduated in 1948 with specialization in Prehistory. The following year he was appointed an Assistant at the Chair of History coordinated by Professor I. Nestor, where he worked until 1952. Meanwhile, in 1950, Comşa also began working at the National Museum of Antiquities, which later became the current Institute of Archaeology “Vasile Pârvan” of the Romanian Academy. Since 1960 he continued to work as a researcher in the Institute. He obtained the title Doctor of Historical Sciences, with the thesis entitled “The Boian Culture,” under the supervision of Professor I. Nestor. In 1974 he received the “Vasile Pârvan” prize at the Romanian Academy of Sciences for the monograph “*History of the Communities of the Boian Culture*”.

Eugen Comşa worked in the Prehistory Division of the Institute until his retirement in 1991. He continued to publish actively until his death.

The editors

Selected Publications by Eugen Comşa

Eugen Comşa’s works include a total of 11 monographic and about 400 specialized research papers, out of which 96 were published abroad.

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Jak Yakar

1 Food Production Modes in Neolithic Anatolia and the Neolithization of the Balkans

The Anatolian Neolithic, one of the most fascinating episodes in the socio-economic history of the Near East, continues to be investigated in each of the four geographically distinct regions of Turkey. The Urfa-Diyarbakir steppe country watered by the Euphrates and Tigris river systems in southeast, the Konya-Aksaray plains in the southern Anatolian plateau, the Lakes District in west-central Anatolia, and the Marmara basin and Turkish Thrace in the northwest (Yakar 1991, 1994; Özdoğan, M. 1999; Özdoğan & Başgelen, 1999).

The process referred to by some scholars as “Neolithization” or “Neolithic way of life” can be defined as a slow socio-economic course that evolved parallel to the climatic improvement during the early Holocene. As early as 10000 BP, communities began to experiment with sedentarization. The reflections of these experimentations are hidden, among other records, in the subsistence related activities of these respective communities. In Anatolia, roughly delimited by the upper Tigris and lower Euphrates, the eastern Mediterranean, the eastern Aegean, the Marmara and the Black Sea, climatic conditions favorable to dry farming first transformed the eastern Taurus piedmont before spreading in other directions, including the southern Anatolian plateau. The climatic improvement that started with the early Holocene subsequently reached the Aegean coast and later encompassed the more northerly regions of western Anatolia.

Neolithization in Anatolia may have followed different tracks from its incipient stages. Therefore, it is logical to assume that its stabilization and progress may have followed a different pace in each region. For instance in Cappadocia, in the central plateau, there is a clear connection between a change in the natural environment and sedentism in the late ninth millennium BC. The start of a change from an arid steppe to grassland vegetation in ca 10800 BP was due to increased humidity hence farming villages began to emerge (Woldring, 2002: 63).

Archaeologically, unfavorable changes in the natural environment led to often undetectable inter-communal problems that could have slowed down this process. Economic and health related demographic problems that may have caused temporary reversals, interruptions and renewed beginnings in a different habitat should be taken into consideration.

The economic context of the beginnings of Neolithic process that eventually led to broad-spectrum farming in Anatolia is, generally speaking, well-recorded in most regions of Anatolia, and especially in the south-central plateau (Buitenhuis, 2002). In the southeast too, an integral part of Southwest Asia, a number of sites provide reasonably well-preserved subsistence related documentation (Garrad, 1999). These

are: Hallan Çemi (Rosenberg, 1999), Demirci, Çayönü (Özdoğan, A. 1999), Nevali Çori (Hauptmann, 1999), Göbekli Tepe (Schmidt, 1998), Gürcütepe (Schmidt, 1995), Cafer Höyük (Cauvin et al., 1999), Mezraa Teleilat (Karul, Ayhan & Özdoğan, 2002). Taken together these sites illustrate the long process of development from incipient cultivation to broad-spectrum farming. Moreover, they shed an important light on the internal and external dynamics that sparked the Neolithization in this part of Anatolia. Pinarbaşı, Aşıklı (Esin & Harmankaya, 1999), Musular (Özbaşaran, 1999), Köşk Höyük (Öztan, 2002), Çatalhöyük (Hodder, 1999, 2003; Yakar, 1991), Can Hassan III and I (French, 1998; Yakar, 1991), Erbaba (Yakar, 1991), Suberde (Yakar, 1991), Hacılar (Mellaart, 1970), Höyücek (Duru, 1999), Bademağacı (Duru, 1999), Kuruçay (Duru, 1994) are the principal sites of the southern Anatolian Plateau, including the Lakes District to its west. Yumuktepe-Mersin retains its importance as the representative site of the densely settled Cilician plain.

As for the presence of an Aceramic phase of the Neolithic in western Anatolia, there is as yet some meager evidence from sites such as Çalca in the mountainous region of Can east of Çanakkale, and Muşlu Çeşme and Tepetarla in the Bandırma plain (Özdoğan & Gatsov, 1998).

Orman Fidanlığı, Ilıpınar, Menteşe Höyük, Fikirtepe, and Pendik are the main prehistoric sites that provide a rather limited insight into the northwest Anatolian Neolithization process.

Additional sites such as Keçiçayır and Kabaklı are believed to represent the Aceramic phase of the Neolithic period in the Eskişehir province (Efe, 1996: 217). The location of most of these sites in high terrain away from alluvial plains indicates that their inhabitants were more involved in hunting and gathering rather than in the cultivation of food plants or animals (Özdoğan, 1997: 18; Özdoğan & Gatsov, 1998). Together with Hoca Çeşme and Aşağı Pınar in Turkish Thrace, they illustrate the nature and intensity of cultural and economic interaction between Anatolia and the southern Balkans since the sixth millennium BC.

In southeastern Anatolia, as in the rest of the “Fertile Crescent,” the beginning of the Neolithization process saw its expression in the appearance of sedentary or semi-sedentary communities as early as in the late ninth/early eighth millennium BC (Solecki & Solecki, 1983; Yakar, 1991, 1994).

Floral and faunal records from Early Neolithic sites in the southern Anatolian plateau and southeast Anatolia reflect a certain but not fundamental local diversity in subsistence practices prior to the appearance of fully-fledged farming economies. Initially, these basically hunter-gatherer semi-sedentary/sedentary communities derived their group-based subsistence requirements from hunting and gathering a wide variety of animals and wild plants. They also knew to supplement their food stores by undertaking small-scale cultivation of pulses, as was the case, for example, at Aşıklı Höyük, Çayönü and Cafer Höyük (Cauvin et al., 1999: 101).

Early agricultural villages in Anatolia were usually established on or close to hydromorphic soils and not on free-draining drier terrains. Because these locations

have the capacity to retain water they were particularly suitable for cereal agriculture; they allowed crops to grow particularly in environments exposed to the Mediterranean climate of warm, wet winters and hot, dry summers (Harris 1996: 558). Neolithic sites in the Beysehir-Sugla and Konya Basins demonstrate that they were all located on alluvial deposits, at the margins of fans and seasonal lakes. As already pointed out above, these locations were no doubt selected by agriculturalists because of water retentive soils. In many parts of the Balkans too, regional archaeological investigations show a consistent correlation between the distribution of early Neolithic sites and floodplains, river and lake margins.¹

It is also possible that in the earliest systems of small scale and locally intensive cultivation in the southeast Europe, as in the early stages of farming in Anatolia, seasonal horticulture most likely preceded cereal agriculture.²

As far as the archaeological survey evidence goes, in Greece and in the southern Balkans, these were areas that saw the emergence of agricultural villages and did not produce evidence that could be indicative of a Late Mesolithic/Epipaleolithic population substratum. This picture could still change, but in the meantime, those supporting the demic-diffusion approach in explaining the spread of farming from East to West often emphasize these qualities.

The cultural diversity encountered in the four geo-cultural regions of Anatolia suggests that in their respective Neolithic communities, particularly among those living in the southeast they were not isolated or entirely self-contained. In fact, recent archaeological investigations support the view that, ethno-culturally speaking, the Neolithic society of Anatolia was not a homogenous entity. The same may be presumed for societies that inhabited the geographical expanse surrounding Anatolia.

Regarding the postulated movements of Neolithic farmers from the East towards the West, I believe that in the distant past as well, village communities that were successful in maintaining a steady demographic and economic growth over generations would not have undertaken large-scale migrations unless some sort of a crisis would have forced them to do so. There are no indications at Neolithic centers with seemingly uninterrupted settlement sequence such as Çatalhöyük, nor is this present in the paleoenvironmental records of the Konya plain (Kuzucuoğlu, 2002) that would suggest a major demographic or environment instigated crisis in the south-central plateau. Naturally, under certain socio-economic conflicts and stress situations not visible in archaeological records, communities (or groups detached from them) would have moved out in search of new habitats to resettle. However, to presume that such movements would have followed a single directional path leading from socio-economically/ culturally to less developed regions, could lead to misconceptions in

1 For more discussion on Early Neolithic site locations see also van Andel & Runnels, 1995.

2 See also Sherratt, 1980: 313-316.

evaluating the process that led to the Neolithization of the Balkans and the rest of southeastern Europe.

Colonization of the southern Balkans by Anatolian farmers may be presumed if it can be demonstrated that the dissemination of agriculture was in conjunction with spiritually significant new artistic expressions, introduction of pottery, architecture, and burial traditions, of Anatolian origin. Even within the semi-continent of Anatolia, a comparison between the Aceramic Neolithic material culture assemblages from the western and central “Fertile Crescent” settlements and those of the southern Anatolian plateau (e.g. Hallan Çemi, Demirci, Çayönü, Nevalı Çori, Göbekli Tepe, Gürcü Tepe, Cafer Höyük versus settlements such as Aşıklı Höyük or Can Hassan III), shows some outstanding differences in social organization, production techniques and in the artistic expressions of spiritual concepts. Moving in the direction of northwest Anatolia, archaeological records from Demircihöyük, Fındık Kayabaşı, Orman Fidanlığı, Ilıpınar, Menteşe Höyük, Fikirtepe, Pendik indicate that despite varying forms and intensity of interaction with the central Anatolian Neolithic farmers, the latter did not-at least initially-have an outstanding cultural influence over their northern neighbors in the Marmara basin. In view of the rather varied cultural entities so far recorded in Anatolia, the question becomes whether the emergence of farming communities in the Balkans should be exclusively attributed to a westward displacement of central Anatolian farmers. In view of the relatively late appearance of farming communities in the northwest, it is doubtful that the area extending from the Marmara basin to the Troad could be considered a parent or staging area that initiated the Neolithization of the Balkans. Yarımburgaz cave in eastern Thrace is so far the only site that has provided evidence for the existence of a Fikirtepe culture affiliated community involved in farming (Özdoğan, Miyake & Özbaşaran, 1991).

As for hunter-gatherer communities of the early Fikirtepe culture phase that sparsely inhabited the southeastern Marmara littoral, it is highly doubtful that they could have played a decisive role in the diffusion of farming in a westerly direction. Their fishing, mollusk collecting, hunting and foraging activities, as well as their settlement pattern, does not indicate a society in an advanced stage of cultivation.³

The occupation sequence revealed at the mound of Ilipınar west of Lake Iznik provides a good insight into cultural development during the sixth millennium BC (Roodenberg, 1995; 1999b). The stratified pre-EBA remains at this site combined with those from other well-known and partly contemporary settlements such as Fikirtepe (Özdoğan, 1999: 212-217), Pendik (Özdoğan, 1983), Menteşe (Roodenberg, 1999a) and Demircihöyük (Seeher, 1987) that in a sense reflect the cultural and economic inclinations of late prehistoric communities in northwest Anatolia. For instance, the inhabitants of Fikirtepe-type sites in the eastern Marmara coast who, although they seem to have embraced farming probably from their southern neighbors, engaged in

3 For the Fikirtepe culture and related sites see Özdoğan, 1983, 1997: 19-23.

principal subsistence activities that were based on foraging and hunting (Thissen, 1999: 38; Özdoğan, 1983). The type and simplicity of their domestic architecture reflects a socio-economic conservatism no doubt derived from their Late Epipaleolithic roots in the region. Despite some differences in subsistence economies, there are material culture parallels in certain types of ceramics that in particular exist between Ilıpınar and a cluster of Fikirtepe culture sites on the eastern Marmara coast (Thissen, 1999: 32). These are pots with four vertically pierced knob handles and pots with two horizontal lugs (Thissen, 1999: Fig. 2:2-3 and 1, 4) that occur at both Fikirtepe and Ilıpınar. Thissen believes that pots with vertically pierced knob handles were used in the cooking of pulses such as lentils and bitter vetch which both appear to have been major food stuffs at early Ilıpınar. Pulses after an initial cooking-stage, require only a limited supply of heat during cooking, just enough to keep them at a boil. The possibility of regulating the distance between fire and pot by means of strings, so as to control the degree of intensity of the heat, makes pots with pierced knob handles well suited to this activity in this respect. The two handled pots, on the other hand, could have been directly placed over the fire with the large handles providing easy grip when lifting them from it (Thissen, 1999: 32). The inferred structural relationship in the dominant cooking pots between Iznik and the eastern Marmara coast is present also in at least at two sites situated further south and southeast; Menteşe Höyük, Marmaracık and Yenişehir II in the Yenisehir basin and Demircihöyük.

There is no absolute certainty that the founders of the first farming villages in northwestern Anatolia were of central or west-central Anatolian origin. At Ilıpınar, the first village (Phase X) was founded at the beginning of the sixth millennium BC (Roodenberg, 1995, 1999b). The economy of the inhabitants was fully agricultural, and among the domestic species of animals, sheep and goats were dominant (Thissen, 1999: 30).

In the six phases following the Phase X village although no visible signs of disruptions in the settlement activity have been observed, some demographic and ethno-cultural changes during the nearly 600 years of occupation (ca. 24 generations) are well marked through the material culture. During the first 12 generations of occupation at Ilıpınar, freestanding single room houses measuring on average ca. 30m² were constructed in “post-wall” architectural tradition. In addition to these post-wall houses with gable-shaped roofs of reed, the presence of a few mud-slab constructions in the early phases of the village leaves no doubt that these two rather dissimilar building traditions co-existed. The post-wall architecture and the fact that in phase X the dead were buried as primary burials outside the houses—a tradition that was rather alien to contemporary central Anatolian communities—raises the possibility that the original inhabitants of this village, or at least some of them, may have been Balkan affiliated. Indeed, the ethno-cultural origin of the actual founders of the village is not entirely clear. When considering only the architectural characteristics and mortuary practices recorded in Phase X, it is hard to prove that they were of central Anatolian affiliation. Generally speaking, they rather give the impression of sharing affinities

with ethno-cultural entities that inhabited a more northwesterly territory extending beyond the Sea of Marmara and delimited in the east by the Porsuk valley. By this, it is not implied that the founders of the village arrived directly from the Balkans. Presuming that the initial settlers were not of central Anatolia affiliation, we may assume that soon after the foundation of the village the gradual process of acculturation within the existing ethno-cultural environment would have started. The time that elapsed for this process to complete would have depended on the nature of relations either with the indigenous inhabitants or with already acculturated neighboring groups. The fact that in architecture and burial mode, the so-called non-Anatolian characteristics were maintained for a few generations indicates that the process of acculturation may have been rather slow. Anthropological models indicate that in some migrations, the migrating split-off groups eventually fused with local groups (Yakar, 2003:12). In such cases, the speed and rate of acculturation depended on the social structure and size of the split-off intrusive group. A minimum of 25 related people were able to be sufficient to form a short-term viable nucleus for an endogamous community. In the medium or long-term, however, small communities numbering less than 100 faced difficulties in maintaining endogamy. A shortage of potential marriage partners within an endogamous group naturally necessitated marital exchange with other communities (Fix, 1999: 210-211).

Thissen's evaluation of Ilipinar archaeological records reveals a different identity for the founders of this village. Thissen believes that:

"despite the wide divergences between the Konya area and the Marmara basin in the settlement pattern, building methods and stone industry, the underlying concepts as apparent in the manufacture, appearance and use of pottery of both areas relate the Anatolian northwest to the Central Plateau. This selective parallelism in material culture is then either a function of the observed discrepancy in time between both regions, or else directly related to the specific material culture variable itself, viz. pottery, to its producers, and to patterns of tradition and to know-how involved. The same selection would preclude migration from the Plateau to the Northwest, but it might reflect exogamous marriage practices. Simultaneously, the transmission out of the Plateau of knowledge concerning farming was possibly another parallel feature of culture contact between Çatalhöyük and the Mesolithic population further north." (1999).

He concludes that the first farming villages in the Eskişehir Basin, e.g. Demircihöyük and Fındık Kayabaşı (Efe, 1995) were the result of Mesolithic culture contact with the Konya area or, more likely, given the large intervening area, were themselves settled from villages lying between the Konya and Eskişehir basins (Thissen, 1999: 38). This leads to the conclusion that the establishment of the three early farming sites in the Yenişehir basin was linked to the Eskişehir plain although the data that is presently available precludes any further assessment. Thissen is of the opinion that the settlement of Ilipinar was settled by non-locals, perhaps by farmers moving north from the Yenişehir basin. Moreover, according to Thissen, there is no evidence that the initial settlers were hunter-gatherers.

During phases VII-VI to VA (ca. 5700-5500 BC) at Ilipinar, the village architecture shows changes not only in plans but also in construction materials; mud-brick architecture replaced the post-wall and mud-slab constructions (Roodenberg, 1999b: 195). The use of mud-bricks would have allowed the construction of larger houses with internal division. The question arises whether the introduction of mud-bricks and the new type of houses appearing in the second quarter of the sixth millennium BC should be attributed to an influx of central Anatolians into this region, or simply to internal socio-economic development.

In the final phase of the prehistoric village (VB), there are indisputable indications of changes both in architecture and ceramic assemblages. The semi-subterranean architecture of this phase bears no resemblance to phase VA houses. Moreover, the black or dark burnished rippled pottery dated to the Karanovo III period points to intrusive elements perhaps arriving from the Balkans. Past migration models lead us to assume that the prohibitive factor of territorial distance between geographically separated communities did not necessarily mean that there was a complete absence of social contacts between them. Therefore, we may presume that additional groups could have been occasionally drawn to territories already populated by their ethno-cultural affiliates during earlier migrations. Such population intrusions in archaeological records are further substantiated when the links between cultural transformations and human induced changes in subsistence economy and dietary practices are demonstrable. At Ilipinar, as at Hoca Çeşme in Thrace, the animal bone records suggest that goats and sheep were initially preferred to cattle (Buitenhuis, 1995). At Ilipinar following the establishment of the village in phase IX, there seems to have been a shift in preference in meat consumption when pigs became more favorable. In Ilipinar phase VB, there occurred another change in the animal husbandry; cattle were preferred over pigs. In the flora assemblage, it is not clear if the absence of field pea and naked barley at Ilipinar as opposed to the presence of flax (van Zeist and van Rooyen 1995: 162-165) reflects ethno-cultural preferences in the local diet.

In addition to Ilipinar, Menteşe Höyük further south in the Yenisehir basin provides a glimpse of a relatively similar development of a farming community from an advanced stage of the Neolithic onwards. Stratum 3 at this site, which is correlated tentatively with Ilipinar Phase X, is the earliest occupation and according to the depth of the occupation level it may have been founded slightly earlier than Ilipinar.⁴

The earliest among the eight burials recovered from Menteşe Höyük from the Late Neolithic/Early Chalcolithic levels, are dated to Ilipinar VA period (Alpaslan-Roodenberg & Maat, 1999). The primary flexed burials were found lying on their

⁴ It is small mound ca 100m in diameter with a height of 4 m and was occupied during the Late Neolithic/Early Chalcolithic period (Roodenberg, 1999a).

right side. Two of the burials were accompanied with a pot, and one child burial produced the remains of a necklace. Remarkable, as well were the traces of wooden planking under an adult female skeleton. The individuals of all age groups showed carious teeth. Because dental attrition and caries rate in a population depends on dietary factors, one may infer that the reason for the tooth conditions were based on the consumption of considerable quantities of soft and sticky carbohydrate sources such as cereals (Alpaslan-Roodenberg & Maat, 1999: 42).

Despite the wide divergence between the Konya area and the Marmara Basin in settlement patterns, building methods, mortuary practices and some aspects of the stone industry, the underlying concepts apparent in the manufacture, appearance and use of pottery of both areas is considered as relating somehow to the Anatolian northwest to the central plateau. According to Thissen, this selective parallelism in material culture could be either a function of the observed discrepancy in time between the two regions, or it could reflect a variant of the specific assemblage. The same selection would, in Thissen's view, preclude migration from the plateau to the northwest, but it might reflect exogamous marriage practices (1999: 30).

Simultaneously, the transmission of farming knowledge out of the plateau was possibly another parallel feature of cultural contact between the Neolithic farmers and the hunter-gatherers in the northwest.

The foundation of Ilıpınar roughly coincides in time with the Early Chalcolithic Hacilar V-III phase in the Lakes District, the beginnings of the Middle Neolithic Sesklo culture—which was based on two centuries long village life in Thessaly—and Anza and Vršnik Neolithic farming settlements in eastern Macedonia. In the Giannitsa plain of Greek Macedonia, farmers had already been cultivating their land for a number of generations.

Among the excavated Neolithic villages in Anatolia, those that were inhabited sporadically during certain phases of the Neolithic period are more numerous than settlements with long and uninterrupted occupations. This is indicative of recurring mobility among sedentary communities as in other parts of the Near East. Naturally, among the groups who subsisted mainly from foraging and hunting, random mobility would have been a phenomenon causing few, if any, socio-economic repercussions. On the other hand, one would expect communities subsisting mainly from farming to be less prone to mobility, except perhaps those who maintained more than one settlement for the purpose of fostering a broad-spectrum surplus yielding subsistence economy. The evidence from Thrace substantiates this view. The preliminary results of a field survey which studied the settlement pattern and mobility of prehistoric settlements in the Edirne province suggest that the prehistoric villages in the region were not permanent (Erdoğan, 1999). According to Erdoğan, the survey findings indicate that the abandonment and reoccupation of settlements are dispersed either over a large landscape unit (extensive mobility), such as the Tunca River, or over small and

almost identical landscape units (restricted mobility), such as Ortakçı-Kavaklı and Yumurta Tepe, but are not overlapping settlements.⁵

The ongoing debate regarding the gradual spread of farming from East to West cannot be entirely detached from entrenched diffusionist or indigenist views.⁶

Given the information explosion and ever-increasing specialization, the mastery of even a small sub-discipline is extremely difficult in our time. Consequently, as Blumler expressed it “one of the more intractable problems in interdisciplinary research is trans disciplinary communication (Blumler, 1996: 25). He goes on to state the obvious: that it is becoming increasingly difficult to stay abreast of developments outside one’s own sub-field, and almost unavoidably, complexities are neglected while theories become out of date.

Of the two main models of the Neolithization process in Southeast Europe and Europe that strongly dominate current debate, the first is motivated by research into the genetic mapping of present-day Europe. In the opinion of its followers, genetic mapping supports the theory of demic-diffusion as responsible for the spread of the “Neolithic package” from East to West. This would have been a quick and smooth process in the form of a mass migration of population. The promoters of this model argue that if agriculture spread by means of cultural diffusion, it would not have affected the gene distribution in Europe. However, if it spread entirely as a result of a demic diffusion, the European gene pools would contain or be dominated by genes from Southwestern Asia. Conversely, a mixture of cultural and demic diffusions would have probably generated a gradient pointing in the direction of migratory movement. In other words, the genes of original farmers would decrease proportionally as one proceeds from Southwestern Asia toward Europe (Ammerman & Cavalli-Sforza, 1984:85).⁷

The results of another study on genes, this time dealing with the female side of the picture suggest that the ancestors of the great majority of modern lineages in Europe would have migrated from the Middle East much earlier than the estimated 7500 BP, most likely in the Upper Paleolithic period.⁸

The second model, defined as the “availability” model, does not entirely oppose the demic-diffusion view. It transposes the idea of existing frontiers between foragers

5 For reasons of mobility among Neolithic communities see Whittle, 1997.

6 On current views on the subject, see also Budja, 1999: 119.

7 The genetic pattern records produced by DNA from the Y(male) chromosomes (Cavalli-Sforza & Minch, 1997) leads to the conviction, as pointed out by Budja (1999: 121), that the major component of the European gene pool might have derived from Near Eastern Neolithic farmers rather than indigenous Mesolithic foragers. These studies based on the Y-chromosome and mitochondrial DNA variations in human populations propose two demic-diffusion events separated in time.

8 The investigations concentrated on the mitochondrial DNA genetic gradients based on five major lineage groups with different internal diversities and divergence times. In other words, this gene pool is based on the results of phylogenetic and diversity analysis of the mitochondrial DNA sequence variation in the control region of Europe and the Middle East (Richards et al., 1996).

and farmers and their co-existence for certain periods of time. This model proposes a combination of limited colonization in Southeast Europe and the active participation of foragers interacting with farmers in the process of Neolithization. New breeding networks for the continuous spread of agriculture would have been the outcome of such a process (Zvelebil, 1986, 1995: 116-120; Borić, 1999: 46).⁹

It is important to note that the rate at which genetic differentiation proceeds is inversely proportional to the size of populations and also depends on the migration rate between neighboring regions which is accepted at 4% per generation. Under these conditions, it takes between 120 to 150 generation or approximately 3000 years for the variation between gene frequencies to rise to the desired level. With some exceptions, neighboring populations usually have gene values that are similar.

As for the “wave of advance” model, it is still considered relevant because it is also supported by the genetic pattern records. The physical expansion of the agricultural frontier towards Europe through the colonization of Neolithic farmers from the Near East, at a postulated annual rate of 1 km, is supposed to have had a dramatic effect on the European gene pool (Ammerman & Cavalli-Sforza, 1984: 60-84; Cavalli-Sforza, 1996). However, it is misleading to refer to this model simply in terms of annual distance that could be covered by farming communities. Obviously, the offshoots of these demographically quickly expanding exogenous agro-pastoral communities would have felt the need on occasion to form new satellite villages that would preferably be in areas not too distant from their root village and in an environment with which they were acquainted.

There are some scholars who believe that diseases could have had an impact upon the emergence of agriculture as well (Groube, 1996). Warming temperatures activated many dormant parasites. Coastal changes, swamp formations with the rising sea levels created ideal conditions for anophelene mosquitoes and the vector of vivax malaria would also have taken its toll on hunter-gatherers. Africa, Southwest Asia and the Mediterranean region would have also witnessed increasingly frequent epidemics of malaria. Stable endemic malaria (the least destructive form) would have taken longer to develop because it requires not only relatively high host densities near the saline swamps but also depends on uniform temperatures (Groube, 1996: 123). In addition, it is assumed that perhaps less fatal but more numerous and fast spreading viral and bacterial diseases unrelated to resource limitations could have caused demographic crises in certain locations. So, at least in theory, the solution would have been to increase reproduction by settling down in new healthier locations and to switch to farming, in order to reduce the time of birth intervals.

The “indigenist” model, which I support plausible, allows us to presume that local hunter-gatherer groups, particularly those already in the early stages of sedentarization, would have been quite capable of experimenting with the cultivation

⁹ According to Borić, this model is not necessarily applicable to Southeast Europe (1999: 46).

of endogenous food plants in or near their natural habitats. The need to increase, or at least control, the supply levels of food plants would have been a choice dictated by various considerations, and not necessarily solely by shortages in wild food plants or games. Population growth is considered to take place separately for farmers and hunter-gatherers according to logistic models where the parameters defining the initial growth rate and density level at saturation may differ for two populations. For farmers it is believed to be higher. The transition from hunting and foraging to experimentations with selective cultivation may have been lengthy. It is logical to assume that experimentations with cultivation started when communities felt the need to intervene in order to increase or to supplement their undomesticated food plant stocks. Considering the differences in the chronological setting of village communities involved in the incipient stages of agriculture in the “Fertile Crescent”, the entrenched concept of “isochronic line of agricultural expansion” from the East, that was proposed over two decades ago by Ammerman and Cavalli-Sforza (1984: 58-62, Fig. 3.5), should be reassessed with regard to the Balkans and the rest of southeast Europe.

The results of genetic studies do not really explain independently the reasons that bands of hunters and gatherers from the Middle East, some of whom were perhaps experimenting with the cultivation of certain wild food plants, found it necessary or appealing in the 13th millennium BP to cross the Mediterranean at length in order to reach the Iberian Peninsula.

Since models of farming that existed in Anatolia in Greece or Macedonia, including Thrace, in the sixth millennium BC varied in organizational and production complexity, the type of farming villages that emerged in the southern Balkans, for instance, could provide the direction and distance of the local hunter-gatherers’ interactions with agro-pastoral communities. Unfortunately, contacts of this nature rarely surface in archaeological records. Therefore, Neolithic and Mesolithic artifact assemblages are treated as culturally and sometimes chronologically unbridgeable separate entities. However, it could be postulated that through mutually beneficial contacts with farmers, hunter-gatherers could have become familiarized with the advantages as well as the disadvantages of this food production strategy that required a different mode of settlement and social organization.

The Lepenski Vir Late Mesolithic/Epipaleolithic culture in the Danube Gorges provides one of the best-documented examples of the nature of long-term forager-farmer interaction. Hunter-gatherer groups continued to reside in the region for several hundred years after the appearance of the local Early Neolithic and still did not adopt farming practices they encountered during their short as well as long distance expeditions (Budja, 1999: 134). It is very likely that as a result of these expeditions, they did adopt the production and/or use of pottery.¹⁰

10 For the modes of exchange see Voytek & Tringham 1989; Radovanović & Voytek, 1997: 21.

The continued interaction between the two groups may have convinced the local hunter-gatherer groups to adopt certain social and eventually dietary practices of the farming communities inhabiting areas outside their region (Chapman, 1993: 115; Budja, 1999: 134; Bonsall et al., 1997: 85-87). Stable isotopic (carbon and nitrogen isotopes) and dental evidence collected from Lepenski Vir, Vlasac and Schela Caldovei burials suggest that Mesolithic people in the Iron Gates region had high protein diets mainly derived from riverine food sources (Bonsall et al., 1997: 85). This diet based largely on fish appears to have contributed to the healthy physical nature of the Mesolithic communities. Osteological data indicate that Mesolithic people were tall, physically robust and generally in good health. Nevertheless, there are significant differences between the isotopic signals of Mesolithic males and females buried at Vlasac and Lepenski Vir, indicating differences in overall diet. These differences could indicate that in such small groups, women may have been acquired from other communities, not excluding the farmers for the formation of new families (Bonsall et al., 1997: 85). The fact that farmers suffer more from tooth decay than hunter-gatherers, should also serve as a guide in establishing the beginning of the introduction of terrestrial food into the diet of the Balkan population.

Nevertheless, it is important to stress that among the Neolithic population at Lepenski Vir there is no significant difference between males and females. The shift in the dietary pattern occurred at Lepenski Vir between ca 7600 and 7300 BP (or in the second half of the seventh millennium cal BC). Collagen samples from burials post-dating the 7300 BP suggest the intake of significantly higher proportions of terrestrial foods. This change may reflect the introduction of stock raising and/or cultivation in the Iron Gates. If this was the case, then one may presume that the transition from Late Mesolithic to Neolithic at Lepenski Vir was not characterized by a wholesale shift in subsistence from foraging to farming; the earliest Neolithic inhabitants of the site continued to obtain a significant proportion of their dietary protein from riverine resources.

Nikolov in reference to the question of interruptions in the development of the Neolithic and later period in Thrace, states that there is much internal continuity (2003). The Neolithic pottery repertory from Tell Karanovo (Nikolov, 1998) reflects continuous dynamic development of artifactual assemblages in northeastern Thrace, with continuity and innovations co-existing. A more notable change is observed at the transition between the Karanovo I and II periods, when the admixture of paste changes and the red slipped and painted pottery disappear as a technological group. All other elements, however, continue to exist unchanged. Therefore, one may suppose that external contacts did not bring about demonstrable cultural or demographic changes throughout the Neolithic sequence.¹¹

11 At least four transformations of the Neolithic assemblages could be differentiated in Northern Thrace: The Karanovo variant with six stages of development is characteristic in the northeastern

Nikolov is persuaded that the origin of the Early Neolithic painted pottery cultures in the central Balkans should be sought in the south and especially in southwest Anatolia (2003: 40).

As corroborative evidence supporting this, he emphasizes the typological correlation between the regional ceramic assemblages within the wide geographical arch extending from the southeastern Aegean islands to the Carpathian Basin. In his reconstruction, the valleys of the Mesta and Struma were used for the introduction/distribution of Anatolian elements into the central parts of the Balkans (Nikolov, 1989).

In addition to Nikolov and others before him, the possible origins of the Karanovo I culture in Thrace has also been investigated by Nikolova (1998).¹²

She proposes a number of possibilities. Her first assumption is that there was “autochthonous development from the monochromic pottery along with synchronous cultural contacts.” Her second explanatory model, similar to her first assumption, does not preclude the possibility of “the appearance in the Balkans of migrating groups from western Anatolia.” Finally, she proposes the possibility of “a mass migration of Anatolian people into the Balkans and the occupation of the areas that remained free after the initial monochromic stage of migration” (1998: 107). The problem in my view is that none of the migration hypotheses can be substantiated by archaeological evidence beyond any doubt. In fact, even Nikolova admits that her hypotheses “are based mainly on a lack of archaeological evidence of the earliest Neolithic in Bulgarian Thrace” (1998: 113).

This theory brings us to the site of Hoca Çeşme situated on the Maritsa estuary that is often referred to as undisputable proof that the origin of farming in Neolithic Thrace (and in southeast Europe as well) should be sought in western Anatolia. Some of the cultural and subsistence related records of the initial settlers at this site leave no doubt that this small community was already involved in farming prior to the emergence of the Karanovo I cultural horizon. The first two occupations (Phases 4-3) revealed a village of small round houses of stone or stone and timber construction and surrounded by a massive stone enclosure wall. The village layout and architectural characteristics do not reflect specific external inspiration. On the other hand the monochrome ceramic vessels with their particular typology and technology, the lithics and bone tools do possess similarities with those of the Lakes District in Anatolia. The fact that from the start, the villagers felt the need to surround their village with massive wall suggests that they did not feel totally secured. Is it possible that hunter-gatherers inhabited this part of the Aegean Thrace? Perhaps the enclosure wall was against

parts of the Thrace. The Kazanlik variant has four stages of development. The Kapitan Dimitriev variant has four stages of development and covers the western part of Northern Thrace. Although there is not enough evidence to demonstrate, a variant with three stages of transformation may have existed in the Eastern Rhodope area (Nikolov, 2003: 40).

12 She investigated the Neolithic sites in the upper Stryama valley in western Thrace (1998: 107-113).

the intrusion of small sea faring groups. In Phase 2, the layout and character of the village assumed a character encountered in the Thracian inland, but the enclosure wall still remained in use. Houses became rectangular in plan with walls made of wattle-and-daub. Along with this new style in architecture, red slipped and white painted vessels-typical of Thracian inland also appeared (Özdoğan, 1998).¹³ A clay figurine fragment presumably in Anatolian style recovered at Makri on the Aegean coast of Thrace that dates back to late Karanovo I (Efstratiou, 1993: Fig.10C) suggests some sort of interaction with communities in the eastern Aegean.

The distribution pattern of certain types of Balkan pottery provides some indication of population movements following the emergence of the early farming communities in the Balkans. The painted Early Neolithic pottery in Thrace is distributed from west to east and reaches the Tundzha (Tunca) and Maritsa (Meriç) valleys with a certain delay in comparison to the Balkan zone. Compared to northeast Bulgaria, this ware group lasted longer in the western provinces. It disappeared gradually this time starting in the west. As for the dark Neolithic pottery, whose origin is sought in the Circumpontic zone (Nikolov, 1998), it appears first in the northeastern parts of northern Thrace where it outlives its western counterparts (Nikolov, 2003: 42). The gradual expansion of this ware group in northern Thrace is not related according to Nikolov, to ethnic and demographic changes (2003: 42).

Farming related socio-economic changes in southeastern Europe in the second half of the seventh millennium BC necessitate reference to different and sometimes contemporary trends in domestic architecture such as pit-huts and surface-level structures (Bailey 1999). Such trends may reflect the simultaneous existence of two different types of subsistence economy and their respective social organizations. The round and oval pit-huts come from late seventh and early sixth millennia campsite-like villages with no particular planning (e.g. Divostin in Serbia, Usoe in northeastern Bulgaria). In fact, both sites lack a clear pattern of spatial relationship. This infers that the people who inhabited such campsites who maintained this subsistence strategy of earlier times were probably kin-related members of small rather mobile communities. On the other hand, the internally divided surface-level rectilinear structures (e.g. from Divostin in Serbia and Ovcharovo-Gorata in northeastern Bulgaria) reflect a more complex socio-economic organization found among sedentary farming communities (Bailey, 1999).

In the Carpathian Basin, traces of Early Neolithic occupation have been found at very different locations; these range from the occasionally flooded marshes in the lowlands of the Carpathian Basin (Borić, 1999: Fig.25) to cave occupations in the central Balkan region. Continuity with the past is often reflected in the mortuary

13 The nearest sites of Karanovo I culture to Hoca Çeşme are Krumovgrad and Kardjali in the East Rhodope area. According to Stefanova two sherds similar to the ones from the Hoca Çeşme phases I-II were found at Krumovgrad (1998: 2-3).

practices of Neolithic communities like Lepinski Vir, Padina, Vlasac, Topole-Bač. Moreover, the variety of rituals these locations practiced indicates localized beliefs maintained from earlier times. In other words, the lack of uniformity in the expression of beliefs suggests that rituals were not transplanted as a result of demic-diffusions. One of the double burials at Topole-Bač in Vojvodina, dated to a time segment of 7300-6800 cal BC, seems to connect the first users of pottery at this site with their local forebears (Borić, 1999: 65, n.6, Fig.28). The age of these skeletons indicates a continuity with the same practice in relation to ancestral traces seen at Lepenski Vir, Padina or Vlasac.¹⁴

In conclusion, I would not exclude the possibility that hunter-gatherer groups in the Balkans, as in the Near East, were capable of choosing different options to cope with demography and/or environment related economic stress situations. Ethnographic studies show that the fertility of hunter-gatherers is low in comparison with that of farmers. Typically hunter-gatherers have a spacing of four years on average between successive births and a completed fertility of five children. With the mortality rates that are prevalent among hunter-gatherers, births and death tend to balance one another so that such mobile populations are basically stationary from a demographic point of view (Howell, 1979; Lee, 1972). The shift to sedentism with agriculture removes this population constraint and makes it possible to shorten the spacing between births to about an interval of 2.5 years and thus to have a larger number of offspring (Ammerman & Cavalli-Sforza, 1984: 65-66).

Regarding migratory movements by hunter-gatherers, one may assume that those occupying favorable locations for broad spectrum subsistence activities, including foraging for wild pulses and cereals would not have moved out so readily even under certain demographic or socio-economic stress situations. As suggested by Hillman, an obvious solution would have been to try to increase yields from local stands of key staples (1996: 192-193). Acquiring such staples through the exchange mechanism with those already pursuing farming would have been an option.

In short, for hunter-gatherers, options for changes entailing shifts in location and subsistence economy would have included: a) a temporary shift from broad to narrow spectrum exploitation and, if necessary in a different ecological niche, b) a shift from narrow to broad-spectrum exploitation, c) decreased mobility and thus a preference for permanent settlement over seasonal ones. The first two options could have resulted in the establishment of dispersed and seasonally inhabited villages, with some of these perhaps being occupied for most part of the year. We may reasonably assume that the first option, as well, could have eventually led to a population stabilization sometimes followed by an accelerated increase among the exogenous communities. A population increase could have resulted in one of the following economic strategies:

14 Some dated graves from Padina give results that put the absolute age of the human remains associated with the stone construction at the end of the 10th millennium cal BC (Borić, 1999: 57).

a) broad-spectrum exploitation in an optimal zone, b) a shift to a marginal zone—such a move would have required a larger measure of mobility, but at the same time would have allowed for a variety of economic activities from selective exploitation of animal and plant resources to trading in specialized commodities, c) sedentism in an optimal zone that would have stabilized the subsistence economy at least for a few generations without recourse to cultivation on condition that the wild life and vegetation were not over-exploited. Decreasing wild food resources reaching critically low levels would have promoted cultivation and domestication as the most logical alternative for most sedentarized hunter-gatherers. Naturally the choice and success of this economic strategy would have depended on a number of interlinked preconditions, namely: the choice of settlement location, the measure of social complexity, demography with a majority of healthy youngsters and eventually an economic organization with an emphasis on resource management and surplus production.

For the Balkans, one aspect of the spread of early farming that requires further attention is the interaction between hunter-gatherer and farming populations. In a sufficiently large area two populations occupying slightly different ecological niches could have co-existed, and inevitably interacted (Ammerman & Cavalli-Sforza, 1984: 16-17). Such interaction could have resulted in a number of developments such as acculturation, mutualism, and so on. The process of acculturation involves the transition from one type of economy and set of customs to another; in other words, hunter-gatherers who eventually become farmers. On the negative side of interaction, one cannot rule out the possibility of ethno-cultural friction, or even the spread of disease which can occur, for example from sedentary farmers to more mobile and isolated communities of hunter-gatherers.

The mechanisms responsible for the spread of agriculture can hardly be explained in terms of its origins alone. To understand this process, other issues should be addressed, including the structures that emerged from its continuing spread. Until rather recently, agricultural spread was discernible only indirectly through various components of material culture alongside pertinent plant and animal remains. Largely still, in theory at least, it is possible to trace the spread of plants and animals directly through their molecular composition (Jones et al., 1996: 96). Of particular interest in this respect is the survival of ancient DNA in these tissues just as it is in humans. For now, however, wheat DNA results are most reliable when studying specimens no older than 3300 BP.

Finally, it is difficult to construe a situation in the Balkans where hunter-gatherer groups were separated from farming communities by clear-cut territorial and social boundaries. Among them, those who mainly subsisted on food sources derived from rivers, lakes and the sea would not envied the farmers working hard to cultivate the land to grow cereals and pulses. On the other hand, they would not have hesitated to do so under the hypothetical circumstances described above. Similar to the dissemination of raw materials, or the spread of regionally developed specialized lithic or other technologies, the introduction of certain species of food plants and

animals might also simply point to interaction between ethno-culturally diverse groups and not necessarily to colonization, except for archaeologically substantiated examples as in the case of Hoca Çeşme in Thrace.

The early Neolithic site distribution in Anatolia and southeastern Europe demonstrates that seed-crop agriculture began in both regions as a small-scale activity that focused on hydromorphic soils, and would have involved the cultivation of not continuous but small patches of fields. Moreover, the prehistoric site of Pınarbaşı B in the Konya plain suggest a pattern of food plant exploitation during the Early Neolithic, said to be characterized by a tradition of diversification and mobility. The territorial dispersion of food resources and their seasonal exploitations must have been at the core of this mobility of hunter-gatherers which in central Anatolia seems to have persisted into later Neolithic periods.

This subsistence mode would not have been exclusive to central Anatolia. In fact it can be postulated that it existed in the regions further west and across the Aegean that enjoyed similar environmental conditions. The Thessalian floodplain in Greece may have been a primary or secondary parent area in the Neolithization process which took place in the Balkans. Judging by the gradual increase in the number and average size of sites in the Larissa Basin during the Early Neolithic, population growth is assumed to have been low until the later phases of this period, when the number of sites increased rapidly beyond the floodplain—a process that, according to van Andel and Runnels, may have led to the agricultural colonization of southern Balkans north of Thessaly (1995: 497). This explanation, although appealing, proposes a chronologically untenable late start for the south Balkan Neolithic. For the Balkans, the more likely model, in my opinion, is the one that incorporates multi-directional small-scale migratory movements from northwest Anatolia, northern Greece and the eastern Aegean (probably not before the late seventh or early sixth millennium BC), and economic co-existence between local farmers, herders and hunter-gatherers.

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Alenka Tomaž

2 The Neolithic Site at Čatež-Sredno Polje

2.1 Introduction

The so-called Lengyel culture can be described as a huge cultural phenomenon, which in its inner circle encompassed western Slovakia, most of Austria and Hungary, southern Moravia and Southern Poland. Various regional and chronological groups have been distinguished within the Lengyel cultural complex based on differences in pottery forms and ornamental styles; these distinct regional groups appeared as early as the earliest Lengyel epoch.

Over the past six decades Neolithic investigations in Slovenia and Croatia have revealed that Lengyel settlements, although previously unknown in the area, were dispersed across these two countries. On the basis of archaeological finds from a very few sites in central and eastern parts of Slovenia, it was Josip Korošec who first defined the so-called ‘Slovenian Neolithic Culture group’ in the middle of the previous century. Resnikov prekop, Ajdovska jama near Nemška vas, Ptujski grad and Drulovka were the sites that were included in this group. They have since become the ‘backbone’ of all Neolithic studies in Slovenia. For thirty years, these were practically the only known Neolithic sites, basically until the discovery of a Neolithic settlement at Moverna vas in Bela Krajina.

It is also important to mention that cultural history has formed the framework for the traditional ways of explaining and understanding of the Neolithic period in Slovenia up to recent times. Every aspect of this study has been concerned with stylistic analysis, determination and classification of the material remains, consequently ascribed to certain cultural and chronological groups.

In the last few decades, much has been accomplished in Slovenian Neolithic studies. Recent discoveries in the central part of Slovenia have revealed a number of new Neolithic sites, e.g. Čatež-Sredno polje, Dragomelj, Col near Podgračeno, Velike Malence, and we have seen subsequently an immense shift in of the implementation of archaeological work. The explanations of so called ‘cultural history’ have also been supplemented with other approaches where questions have become more focused on people and their actions in the past and with their relationship to the environment.

In our opinion, the recently discovered site at Čatež-Sredno polje is the key site of the Neolithic past in Slovenia. The size of the settlement and all other elements including its well defined Neolithic structures with their abundance of material remains and series of ¹⁴C dates are valuable information that will help us reconstruct the life of the Neolithic society.

2.2 The Scope of Paper

This project focuses on a part of an ongoing study of the Neolithic site at Čatež-Sredno polje that incorporates all aspects of human life in the settlement during the Late Neolithic period with special attention to a set of activities surrounding their skills in pottery making.

The Neolithic settlement at Čatež-Sredno polje is one of the most southern manifestations of the Lengyel cultural complex. On the basis of archaeological data, we contend that the site is located practically on the southern border of the complex. Therefore, we pose the question whether it is possible to trace elements in the material culture—especially in pottery assemblages—that can help us understand how cultural or any other forms of borders operated in the past.

2.3 The Site at Čatež-Sredno Polje

The archaeological site at Čatež-Sredno polje is situated on a lower Sava terrace, some hundred meters from the confluence of Krka and Sava rivers, in the southeastern part of Slovenia, in the lowland beneath the town of Čatež near Brežice, a few kilometers from the state border with Croatia (Figure 2.1). The open grounds between the Sava River and the northern fringe of Gorjanci were a popular place to settle and were often inhabited during the past. From an historical point of view, Čatež-Sredno polje is located in close proximity to a number of important archaeological sites of different periods, such as the old Roman road connecting Emona and Siscia, Hallstatt period hill fort and Late Roman fortification at Šentvid, Bronze Age, Hallstatt and Late Roman settlements at Čateški Grič, etc.

This site was first identified in 1998. Because of the construction of a new highway, the area in question had to be thoroughly examined through archaeological methods. In 1998, the entire area was included in extensive archaeological survey, followed by a more intensive archaeological survey in 1999 and 2000. These field surveys provided evidence of a prehistoric settlement with numerous stone flakes and fragments of pottery in the eastern part of the area and the Roman period settlement in the western part of the territory.

The wide-ranging rescue excavations, covering the area of approximately 31,000 m², were conducted in the spring of 2002 (Figures 2.2 and 2.3). In contrast to the relatively scarce surface finds in the area the outcome of the rescue excavation came as a surprise because of the extent as well as the character of the site at Čatež-Sredno polje. Although it was not expected, the excavation unearthed a huge Neolithic settlement with archaeological finds dated to the first half of 5th Millennium cal BC. The excavations of the site offered essential information concerning diverse aspects of Neolithic society in southern part of Slovenia (Guštin, 2002; Guštin, 2004; Guštin, 2005; Guštin et al., 2005; Tomaž, 2005a; Tomaž, 2005b; Tomaž, 2006).

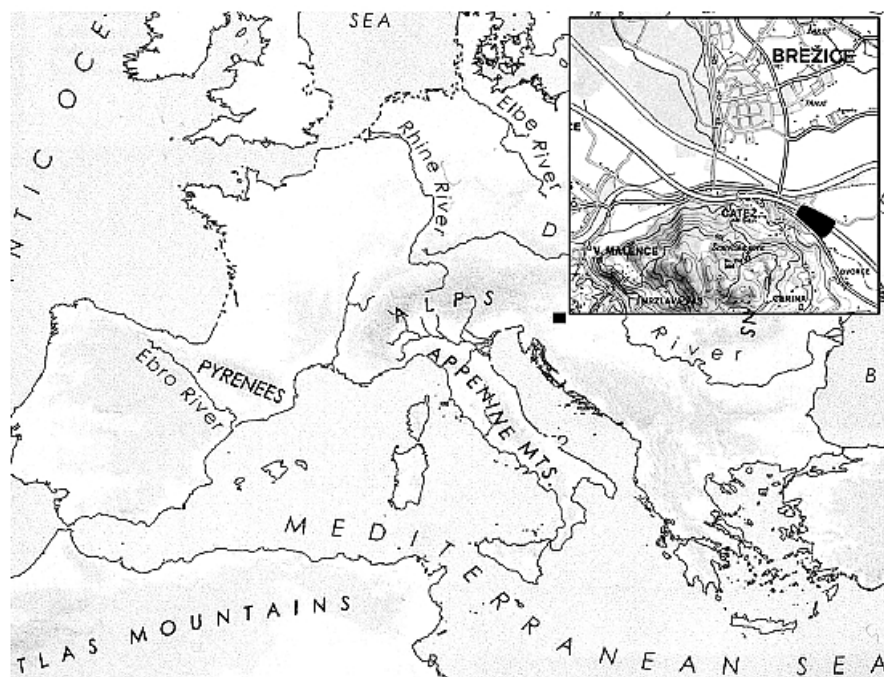


Figure 2.1: Čatež-Sredno polje, location of the site.

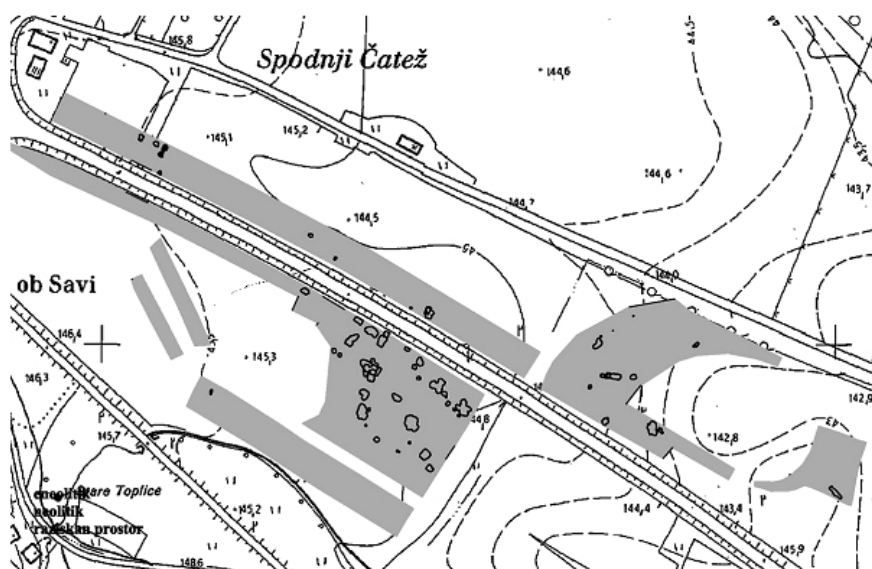


Figure 2.2: Čatež-Sredno polje, the site plan.



Figure 2.3: Čatež-Sredno polje, view of the site.

The Neolithic settlement at Čatež-Sredno polje is extremely large considering the fact that the settled area covers approximately 31 ha, all of which was thoroughly investigated. The extent of the settlement and the fact that it was nearly entirely excavated renders the site one of the most important Neolithic settlements in Slovenia and beyond.

At the site 65 well-defined Neolithic structures were revealed under the plough soil. (Figure 2.4) However, it should be emphasized that the discovered structures were only ‘the remains of remains’, as a result of the intensive agricultural activities during last several thousands of years that followed the Neolithic settlement that have almost entirely destroyed the upper layers of the site. The majority of the structures were discovered in the middle part of the settlement, while at the outside edge only several structures were detected. Among the Neolithic structures 24 were somewhat larger; because of their size they have been interpreted as dwelling pits. The structures were of various shapes from irregular ovals to almost exactly circular designs and were found relatively deep into the geological base-up to 0,7 m. It is important to note that the excavation failed to trace elements that could help us to reconstruct the construction of the dwellings. Only some of the structural elements of burnt clay were discovered in the filling of the pits. Excavations at the site of Čatež-Sredno polje have also exposed more than 40 smaller pits in addition to the dwelling structures, which are generally of more asymmetrical, oval or round shapes and are much shallower than the larger ones. The dwellings from Čatež-Sredno polje have hardly any parallel



Figure 2.4: Čatež-Sredno polje, view of the Neolithic pit.

to the Neolithic sites in Slovenia; to some degree they resemble the badly preserved objects uncovered in Dragomelj.

According to the series of 14C dates, the Neolithic settlement at Čatež-Sredno polje can be dated to the first half of 5th Millennium cal BC. The majority of 23 14C dates range between 4800 and 4600 cal BC (Guštin, 2005: fig. 2). The Neolithic society lived in this territory for up to three centuries, but most likely up to a hundred years less than this.

The importance of the Neolithic site at Čatež-Sredno polje is also emphasized through these archaeological finds. Dwelling pits as well as other small structures contained quite frequent stone flakes and stone tools as well as numerous pottery fragments. This abundance of material remains represents one of the largest Neolithic assemblages in not only Slovenia but also abroad.

2.4 The Stone Tools

The archaeological site at Čatež-Sredno polje yielded the largest quantity of Neolithic stone tools in Slovenia which included more than 15,000 flakes and cores (Guštin et al., 2005: 111). This artifact assemblage is important because it offers the possibility of an insight into the material culture of this large Late Neolithic settlement. The fact that this artifact assemblage was produced in a very limited period of time which excludes the possibility of its mixing with the earlier or later elements, gives the assemblage even greater value than it would otherwise.

By investigating the main groups of stone tools discovered at Čatež-Sredno polje, we may reach an explanation of stone tool making that subsequently also support certain conclusions regarding the functioning of prehistoric economy. The stone tools were generally made from the local raw materials even though several rare and exotic pieces are also present including a group of miniature stone axes. The complete analysis of stone tools is at present still in progress; however, some preliminary conclusions may be reached on the bases of a pilot study. According to the data, pit 093 can be interpreted as a place where the initial phases of raw material preparation were performed, while another pit (055) may be interpreted as a location for performing particular activities (Kavur, 2005: 144).

2.5 The Ceramics

Ceramics, as a group of archaeological remains, are often as a whole far better preserved than most other residues of prehistoric life. Ceramic assemblages are durable and abundant. They can exhibit an endless diversity of variations in technology, form and decoration and are an excellent source of data for interpretation. Pottery is 'cultural', meaning that its variation is more or less entirely dependent upon the ideas and skills of the potter. Pottery can therefore provide useful information concerning a culture's technological adaptation, chronology, subsistence, household activities, trade and exchange, symbolic systems and a wealth of other topics.

Altogether at Čatež-Sredno polje more than 68,600 pottery fragments were discovered, including the remains of entire or of parts of vessels and other ceramic objects such as spindle whorls and ceramic beads. The size of the pottery assemblage of Čatež-Sredno polje greatly exceeds the normal finds at Slovenian locations. As already mentioned, the ceramic and other finds originate from a well-defined intact archaeological context: pits. When placed within the context of the chronology of known 14C dates, they represent an exceptionally good base for observing diverse aspects of material culture in a very precise time period. The 14C dates indicate that the settlement did not exist for a very long period of time—at the most it would have lived there for a few generations. This is something that must be taken into consideration when dealing with material remains of the site.

The archaeological record from Čatež-Sredno polje with all its characteristics and peculiarities permits us to look towards a set of activities relating to the skill of pottery making. According to the results of the analysis of more than 10% of all typologically or ornamentally distinctive fragments, we can preliminarily conclude that in a broader sense the whole pottery assemblage is homogenous in terms of technological, typological and decorative indicators (Figure 5; Tomaž 2005b).

The pots from Čatež-Sredno polje were all handmade, usually with the so-called 'coil' technique. Macroscopic examination of pottery fragments has shown that the greater part of pottery was made from medium grained and fine-grained fabrics while

coarse-grained and very fine-grained fabrics were of rather infrequent use, which indicates the intentional selection of raw material. The surface of the pottery was in general burnished and only in some cases smoothed, which illustrates a preference for an accomplished final result. Only in exceptional cases was a red, brown or black slip also applied on one or on both sides of a vessel wall. The majority of the Neolithic pottery was baked in incomplete oxidizing atmosphere; complete oxidizing and reducing burning were rather uncommon baking methods. Incomplete oxidizing burning is expected within prehistoric pottery, since the firing technology was not yet developed to the standards that would allow more sophisticated baking.

The pottery assemblage of Čatež-Sredno polje was, as we already mentioned, extremely large and has encompassed a number of different basic shapes of pottery including bowls (Figure 2.5: 1, 3), dishes (Figure 2.6: 2, 5, 6), pedestal dishes (Figure 2.5: 7-9), other pedestal vessels (Figure 2.5: 11), jars (Figure 2.6: 2-6), beakers (Figure 2.6: 10), ladles (Figure 2.6: 10-11), lids (Figure 2.6: 1), miniature vessels (Figure 2.6: 7-9, 12-14; Tomaž, 2005a) and several other ceramic objects, such as ceramic beads of different shape (Figure 2.6: 15; Tomaž, 2006) and loom weights, etc. There were numerous variations of all of the basic shapes, meaning that almost each vessel was unique when taking into consideration all detailed typological characteristics. Multiple variations of the same basic shape are expected within all prehistoric pottery, given that the pots made during prehistory were all handmade and for that reason are unique (Tomaž, 2005b: 113-129). There are practically no two vessels that are identical. Even though the shapes of vessels were often remarkably similar, their size and proportions usually differed considerably.

Decoration of the pottery was quite frequent and was dominated completely by the impressed technique. Most common among these were impressions of fingernails (Figure 2.5: 8; Figure 2.6: 7, 11); in some structures more than 70% of the decorated shreds were decorated in this manner (Figures 2.5-2.6; Tomaž, 2005b: 113-129). In many cases fingernail impressions were combined with geometric incisions (Figure 2.5: 7; Figure 2.6: 4). All forms of handmade appliqués were also quite common, (Figure 2.5: 1) especially in combination with fingernail impressions. (Figure 2.5: 2, 3, 5, 6). However all three of these principal decoration techniques were only occasionally applied together (Figure 2.5: 9).

Based on the radiocarbon dates and technological and typological character of the pottery, we may assume that the Neolithic settlement at Čatež-Sredno polje was settled approximately at the same time as several other sites in the central part of Slovenia, -e.g. Dragomelj, Resnikov prekop, Drulovka near Kranj, Col near Podgračeno, etc. Mitja Guštin included all these sites in his proposal into a group that he called the Sava group of Lengyel Culture (Guštin, 2005: 7-36, fig. 2). Of course, we can also observe some similarities among the pottery assemblages from other Neolithic sites in central and eastern parts of Slovenia; however it should be clarified that their resemblance is not as evident as with Dragomelj.

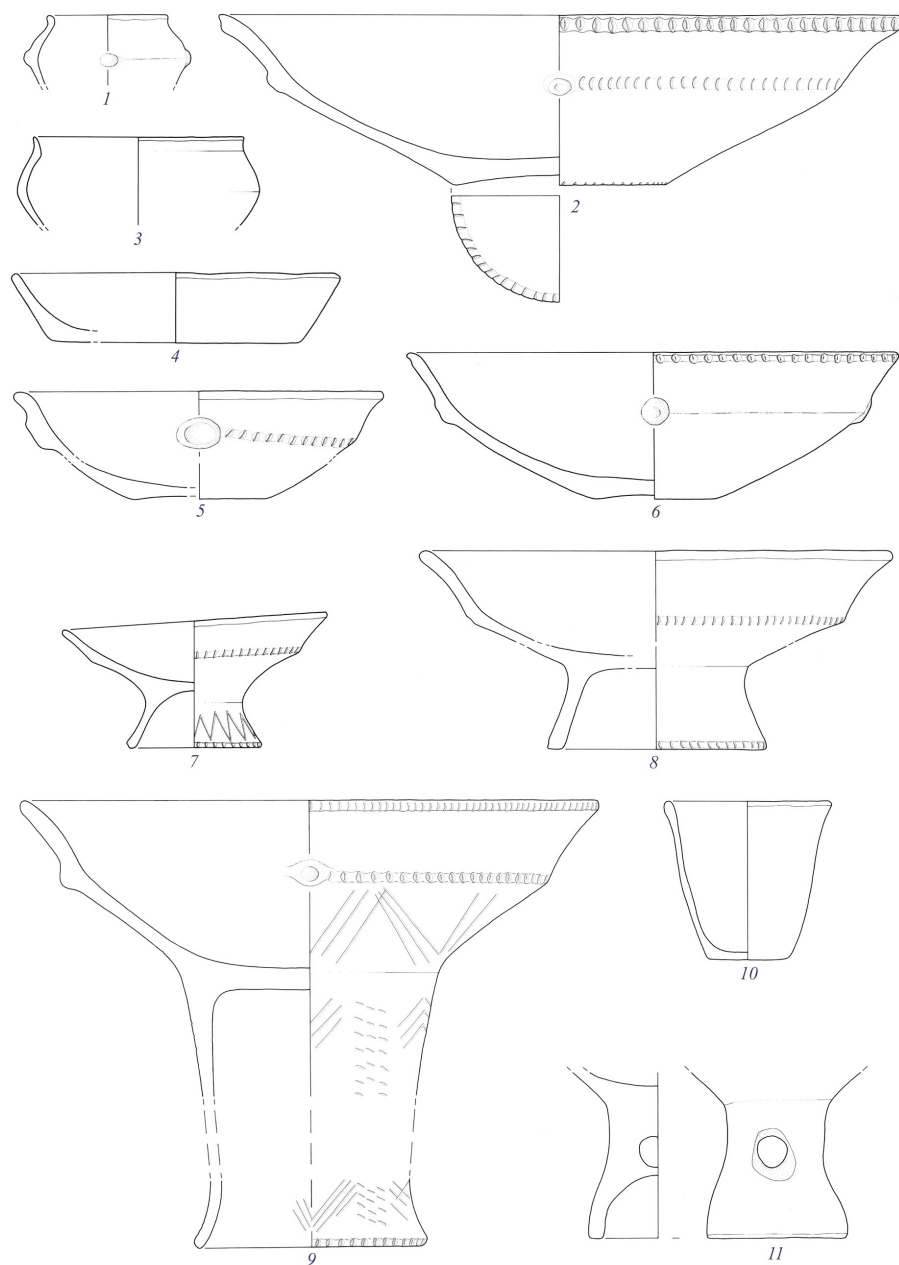


Figure 2.5: Čatež-Sredno polje, basic shapes of the Neolithic pottery (different scales).

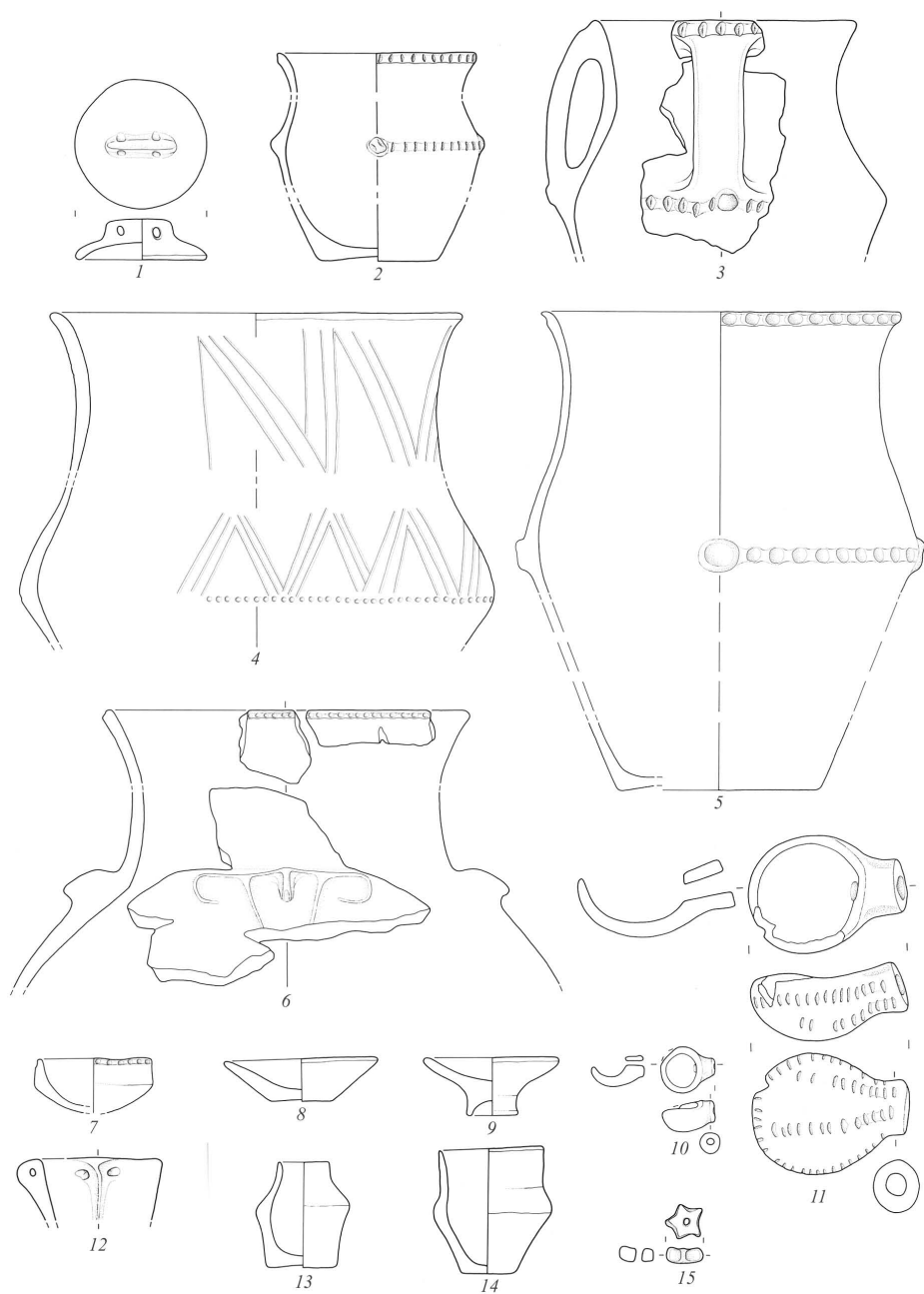


Figure 2.6: Čatež-Sredno polje, basic shapes of the Neolithic pottery (different scales).

2.6 Considerations

The basic process of making earthenware pottery was much the same for people all across the world, but each group had its own style and learned to use the clays and the materials near at hand. Successful pottery-making requires skill, knowledge and experience. The preliminary study of the archaeological record with all its pottery finds from Čatež-Sredno polje indicates that its inhabitants were skillful pottery-makers, who had a fairly good knowledge about the surrounding environment and the properties of exploited raw materials. Their skills in forming and producing the vessels encompassed different handmade techniques, elaborate surface treatments, successful firing methods and a variety of decorative techniques, which enabled them to create unique products for everyday use as well as for special occasions.

A comprehensive analysis of pottery from the Neolithic site at Čatež-Sredno polje is still in progress and encompasses analyses of technological, typological and decorative elements of the pottery as well as different sorts of archaeometrical studies. We anticipate that this will enable us to understand and explain many different aspects of Neolithic pottery production, its use and its discard in a given settlement and period of time and, of course, in a specific environment. In addition, the detailed analyses of various indicators, such as fingernail ratio and fingerprints, are also going to help us to address several other questions concerning the people of Neolithic Čatež-Sredno polje. For example, who were the pottery-makers? However, these issues are the concern of our future research.

At the end of our presentation we will address the questions related to the problem of cultural borders. As already stated, Čatež-Sredno polje is an indisputably good Neolithic case study since it is one of the most southern manifestations of Lengyel cultural complex. It is an interesting, yet unrelated coincidence that the location of the Neolithic site at Čatež-Sredno polje is no more than few kilometers from the present day border between Slovenia and Croatia. Our main concern is how to address this issue. Today borders are easy to detect, since they can be of a political, linguistic, material, and mental nature and in some cases also of a national one. It is a little bit more difficult to establish prehistoric cultural borders. Based on traditional explanations the influence of 'cultural history' on cultural borders may be traced more or less through material evidence gained by stylistic analysis and determination and classification of the material remains.

At Čatež-Sredno polje there are some stylistic elements of the pottery that are so fundamentally different from classic Lengyel traditions that they are obviously derived from a different cultural tradition, e.g. the perforated feet of vessels (Fig. 2.6: 11). This kind of foot is most common in territory southern of Slovenia, in Croatia in cultural tradition called Sopot. There are also some other decorative elements that reveal the same influence, e.g. the fingernail impressions and other kinds of impressions that are more commonly found in the Sopot culture (especially in its last phase called Brezovljani type of Sopot culture) than in the Lengyel cultural complex. However, it

should be noted that these kinds of observations are merely connected with one part of the material aspect of the culture, and in order to establish the existence of any prehistoric cultural border it is of great importance that we continue to seek as much other evidence as we can.

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Dragoş Gheorghiu

3 Building and Burning: The Construction and Combustion of Chalcolithic Dwellings in the Lower Danube and the Eastern Carpathian Areas from the Perspective of Experimental Archaeology

3.1 Introduction: The Problem

Archaeological excavations document that in prehistory, the majority of houses burnt were destroyed by fire. There is a complex of reasons for this destiny of pre-historical houses; in most cases excavations do not provide evidence for detailed analysis or arguments for any serious hypothesis to answer two important questions: how and why did specific houses, groups of houses or whole villages burn? However, experimental archaeology has proven an essentially useful instrument for exploring the process of prehistoric house construction and combustion by providing real constructive, unambiguous evidence for theoretical conclusions (Bankoff & Winter 1979; Gheorghiu 2007a; 2007b; in press; see also Hansen 1961; 1966; 1967; Coles 1973; Rasmussen 2007).

The reason for the combustion of specifically investigated houses and villages has been interpreted by many scholars (Bankoff and Winter 1979; Tringham & Krstić 1990; Tringham 1992; Stevanović 1997, 2002; Chapman 1999; cp. Gheorghiu 2005a; 2013; Gheorghiu & Dumitrescu 2010). As previously explained, experimental archaeology may assist in providing arguments for the interpretation of primary cultural anthropology and historical problems in prehistory. This chapter will argue this is a specific research problem, for which experimental archaeology may provide strong evidence regarding the role of humans in controlling fires during house combustion.

It is important to stress the interrelation of the different components of the prehistoric material culture in South-East Europe; materials that respectively existed with comparable functions and destiny. In particular, ceramic objects are characterized by an antagonistic cyclical principle of construction and deconstruction (Gheorghiu 2001; 2002a; 2010a), i.e., in the ceramic figurines alone, the *chaînes opératoires* of construction incorporated the deconstruction of objects demonstrably also incorporated their method of deconstruction (Gheorghiu 2005b; 2010b).

Approaching the problem of the destiny of the prehistoric houses from the perspective outlined above, this paper attempts to demonstrate an existing relationship between the method of construction of wattle and daub houses and their deconstruction by fire as a general theoretical model based on empirical data from author's terrain-based experimental archaeology. The main goal of this research is not to offer an explanation

of the process of deconstruction, but rather to focus on certain specific problems of pyrotechnology (Gheorghiu 2005c) in the process of the combustion of these houses, through experimental archaeology. As already mentioned, experimental archaeology seems to be the most adequate instrument for understanding the cyclical process of construction-deconstruction, a complex technological process which cannot be fully grasped only by examining the archaeological record.

3.2 The Diversity of Prehistoric Architecture

When analyzing the prehistoric architecture of the area discussed, there is a noticeable process of evolution over time from simple semi-subterranean houses to surface houses with wooden and clay platforms (see also the extensive bibliography in Lazarovici and Lazarovici 2007). The semi-subterranean houses left round or oval cavities in the ground and no traces of their wooden structures and experiments (Gheorghiu 2006a) of reconstructing them revealed the fact that a roof's beams could be thrust directly into the walls of the cavity without leaving any archaeological trace in the soil, since the oblique voids (that resulted after the burning or the removal of the wooden structure) were compressed (and thus eliminated) by the weight of the soil. The vertical posts could also have been positioned on wooden planks (Ghinoiu 2005: 108); this is another approach that would have left no traces in the archaeological record.

Since the Early and Middle Neolithic periods in the Lower Danube area are perceived as having been epochs with a highly dynamic population due to the thin layers of occupation (Andreescu et al. 2002: 44 sq.), it is possible that the wooden material was also easily recovered, as experiments revealed (2004-5).

The emergence of surface architecture in the Lower Danube area has been attested to as early as the Boian-Giulești phase (Neagu 2001). This can be interpreted as an index of a developing sedentism as well as of social difference and subsequently of an emerging stratified society.

The shape of the wattle and daub surface houses are still objects of discussion; for instance, the method of fixing the wooden structure into the soil has led some scholars to conclude that some of the houses were two-storied. Despite this speculations the shape of the roof was never brought into question, and no one has concluded that there was a possibility of a functioning heating system inside the houses. As for the burning of this architectural object, many hypotheses were proposed, tested experimentally. It is for this reason that I decided to study the processes of construction-deconstruction at full scale, in order to be able to observe the relevant details.

One of the experiments I carried out (August 2003) consisted of building a house of 6 x 3.5 meters (House 1), with a wooden platform, an internal pillar sustaining the main longitudinal cross-beam, a clay bench, an oven and a grinding place. I used as a main model for this experiment the plan of a house from the Radovanu

tell (building E, level II, Comşa 1990: 89), dated to early Gumelniţa (Pandrea 2000). This house was built to gather information on the process of building and weathering.

Another experiment (August 2005) was to build a long house of 8 x 4 meters (House 4), with a wooden platform, an internal pillar and an oven, based on several plans of Cucuteni houses (Ursulescu 2002; 2003; Petrescu-Dîmboviţa and Văleanu 2004: 56; 59; 60; 62; 72; as well as clay models from the Voroshilovka clay model (Gusev 1995). This house was built to gather information on the process of burning and weathering of a wattle and daub architectural object.

The architectural remains accessible in the archaeological record of the Gumelniţa-Karanovo VI and Cucuteni-Tripolye traditions were used to reconstruct the shape of the Chalcolithic houses and are listed here (see also Gheorghiu 2009):

1. Rectangular plans of houses, with wooden platforms (Todorova 1982; Marinescu-Bîlcu et al. 1997; Haşotti 1997: 80; Ursulescu 2003: 9, fig. 1; Lazarovici & Lazarovici 2007: 115ff);
2. Foundation trenches (Todorova 1982: 81, fig. 41; Popovici & Railland 1996: 24; Marinescu-Bîlcu et al. 1997: 68; Ursulescu et al. 2002:16);
3. Post holes of variable dimensions in foundation trenches (Ursulescu et al. 2003: 7; Ursulescu et al. 2002: 15 sq.; Marinescu-Bîlcu et al. 1996-1998: 95; Todorova 1982: 23-32, figs.13-22);
4. Evidence for pointed posts (Ursulescu *et al.* 2003: 16; Todorova 1982: 81, fig. 42), inferring the thrusting into the soil by pressure or rotation;
5. Wattle and daub fragments of walls and ceilings;
6. Various techniques of construction in the same building (Pandrea et al. 1999: 147);
7. Wooden platforms made of split wood (Comşa 1990: 88, fig. 47; Todorova 1982: 153, figs. 96 and 97; Lazarovici & Lazarovici 2007: 99; Dragomir 1983: 27) or layers of branches and leaves with plaited twigs and reed bunches (Marinescu-Bîlcu 1974: 25);
8. Post holes inside the house (see Comşa 1990: 87, fig. 46; Todorova 1982: 23-32, figs.13-22; Lazarovici and Lazarovici 2007: 98), and plastered “columns” (Dumitrescu 1986);
9. Imprints of vegetal cords for bonding wooden structures (Comşa 1990: 84, figs. 44a and b);
10. Interior architectural features as fixed pyroinstruments (ovens or fireplaces), concave spaces for grinding and clay benches (Comşa 1990: 86; Todorova 1982: 118, fig. 70; Lazarovici and Lazarovici 2007: 102);
11. Overlapped layers of fine finishing on walls or ovens (Haita 2003: 82 ff);
12. Paintings on exterior and interior walls with red pigment (Comşa 1990: 81);
13. Architectural clay models representing houses (Todorova 1982: 40, fig. 24; Gusev 1995; Bem 2002:190ff) and group of houses forming settlements (Gheorghiu 2002a: 103; Gheorghiu 2005b), which offer information about the proportion of the built space and about the openings in the walls.

The archaeological experiments to reconstruct the Chalcolithic houses used the above mentioned data, as well as ethnographic evidence from this region.

3.3 The Building Process

3.3.1 Foundation Trenches

A first step of the process of building was the excavation of the “U” shaped foundation trenches (0.40 m deep and 0.40 m wide).

The foundation trenches are mentioned in the Danube area at the end of the Boian and beginning of the Gumelnița traditions, and in the Eastern Carpathian area in the Precucuteni and Cucuteni traditions, where they seem to have been imported from the south (Ursulescu et al. 2003: 6-7). It has been speculated that the absence of foundation voids in some buildings may have been the result of using wooden beams to support the vertical posts of the walls (Dumitrescu et al. 1954; Comșa 1990: 81), as suggested by ethnographic examples.

The efficacy of this method was proven by experimenting with fixing the vegetal structure of the walls into any kind of soil, from weak riverine and lacustrine soils, to weaker compressed soils of the tell settlements.



Figure 3.1: The foundation trenches.

3.3.2 Walls' Wooden Structure

The second step was to raise the wooden structure of the walls. For the experiments the main posts, of 15 to 20 cm diameter, were thrust 40 cm into the foundation trench at a distance varying between 1 to 1.5 m. A set of secondary posts, of 7 to 10 cm in diameter, were thrust between the main ones, to fix the wattle plaiting (Fig. 3.2). To thrust the posts into the wet soil, a rhythmical movement of rotation was utilized, a technique inspired by ethnographic evidence from the Lower Danube area.



Figure 3.2: Construction of the walls.

Excavations revealed that wooden posts were used in the Balkans (Nikolov 1992), the Lower Danube (Berciu 1956, Comşa 1986) as well as in the Eastern Carpathian area (Ursulescu *et al.* 2002). The findings also revealed variability over time in the quantity of wood used within the same settlements (Ursulescu *et al.* 2003: 6). Compared with Gumelnița, the wall construction in Cucuteni houses employed a larger quantity of wood (see Ursulescu *et al.* 2002: 17).

By comparing the plans of the Bulgarian Gumelnița tells, and the recent excavations of Cucuteni settlements (see for example the houses 7, 8, 9 at Isaiia, Ursulescu *et al.* 2003: 9, fig. 1), one can observe that a great number of medium and large houses had an internal wooden structure made of posts positioned on the central axis of the dwellings in order to offer a larger aperture for the interior space

(see Todorova 1982:13-22, figs. 23-32). Such spatial organization was also found at the Radovanu building E, level II (Comşa 1990).

To reproduce a similar opening in the reconstructed house, a 5m long post, with a 20 cm diameter, was used to sustain two master beams and the wooden structure of the ceiling.

Since this important post was positioned near the oven, it was protected against fire with a thick coating of clay (Fig. 3.3), similar to that of the two “columns” discovered in Căscioarele Island (Dumitrescu 1970).



Figure 3.3: The wooden post covered with clay, located inside the house.

3.3.3 Wattle and Daub

The third step was the making of a plaited wattle structure between the posts, covered with wet clay mixed with straws and chaff, a method of construction that has been found in use as early as the Neolithic period (Perlès 2001: 197; Treuil 1983). Mixing clay with water and small vegetal fibers results in a plastic reinforced, material with good thermal properties.

A vegetal trellis covered with pressed clay (Fig. 3.4) and anchored by the foundation trenches resulted in a structure with a good mechanical resistance. It transformed the building into a monolithic structure which in turn eliminates the lateral movements of the walls.

Experiments served also to demonstrate that pressed daub on the wattle structure confers a long life-span to the walls.



Figure 3.4: Structure of the walls.

3.3.4 Water and Construction

To prepare the mixture of clay with vegetal fibers, a large quantity of water was required (e.g. for the building and plastering of a space of 6 x 3.5 x 2.50 m, with 120 cubic meters and 600 kg of straw, 5000 liters of water were needed to produce the daub). Because various settlements were surrounded by perimeter ditches (see Ștefan 2010: 41 sq.; for a non-defensive role of ditches see Marinescu Bîlcu 1974: 20; Bem 2001), one can infer a functional role for these architectural features from the aforementioned building process as having been water reservoirs (Gheorghiu 2003: 43), one that would use the water collected from rain and melting snow and would thus solve the difficult problem of water transportation.

3.3.5 Wooden Platform

The main role of a platform was to create a waterproof and fireproof protective layer, while secondarily it would produce a firm surface to support the future layers of the dwelling by covering the weakened soil with the perforations of the previous layers of dwelling (an example could be the House no. 6, Level 3, at Ovcarovo tell, whose platform overlaps the foundation trenches of the previous level of dwelling; see Todorova 1982: 194, figs.135; 137 and 196, fig. 139).

In the Lower Danube area the presence of wooden platforms is recorded in the surface buildings as early as the final phase of the Boian tradition, and became a common architectural trait in the Gumelnița tradition (see Todorova 1982: 153, figs. 96-7; Marinescu-Bîlcu et al. 1997: 67). A similar process can be observed in the Eastern Carpathian area, in the passage from the Precucuteni to the Cucuteni tradition (Marinescu-Bîlcu 1974: 27; Petrescu-Dîmbovița et al. 1999: 31 sq.).

A singular technique is also documented in the Stoicani-Aldeni tradition, where wooden platforms were built on a vegetal layer (Dragomir 1983: 34).

To protect the house from accidental ignition, the platforms manifested gaps in the areas where the ovens were positioned.

The platform built for the experiments was constructed of split trunks and plastered with daub (Fig. 3.5), positioned with the flat surface on the soil.



Figure 3.5: The platform constructed of split trunks and plastered with daub.

3.3.6 Ceiling and Roof

To build the ceiling, a series of tree trunks of maximum 10 cm diameter were positioned on three transversal beams and plastered to form a solid base which allowed the attic to support heavy loads and to be inhabited (Fig. 3.6); this deduction is supported by many archaeological examples. In addition, the attic could have functioned as a food processing and depositing location, because all the smoke produced in the house could have been drafted through the ceiling's openings and the thatched roof.



Figure 3.6: The roof.

Since there are no archaeological remains of wooden roofs of prehistoric houses, their shape, proportions and structure were copied after architectural clay miniature models (Gheorghiu 2009: 6; Gheorghiu, *in press*). For the reconstruction a cross-beam shape of the roof was chosen since it is quite frequently found in architectural representations under the shape of two “horns” on the main façade (see Todorova 1982: 41, fig. 25/1).

To reproduce this particular shape a series of rafters were positioned on the main cross-beam, their jointed ends protruding by 40cm over the line of the cross-beam. This technique was probably used to better fasten the vegetal cover of the roof.

The main cross-beam was made of two joined trunks, fixed on the central post; this was necessary because of the large dimensions of the house.

All these wooden pieces needed to be fixed on the horizontal and vertical wooden elements of the walls; for this, the solution used in the experiments involved the use of wooden nails and hemp ropes.

Although neither of these techniques were identified in the archaeological record, ethnographic evidence from all over the world (for the use of vegetal cords see Coudart 1998: 62 sq.) supports the employment of these two techniques in prehistory.

3.3.7 Walls' Finishing

The foundation trenches, the plaited twigs, the joints of the posts, beams and rafters, as well as the hemp ropes and the wooden nails (Fig. 3.7), produced a solid wood structure which was plastered with clay mixed with straw. After this composite material shrank, the tensions created between the dry clay and the ligneous material produced fissures along the principal wooden elements of construction which needed to be filled up with a fine coating made of clay mixed with dung and water.

The floors of these structures were also periodically coated through a similar method as shown by ethnographic evidence and the micro stratigraphies of prehistoric houses.



Figure 3.7: The wooden nail.

3.3.8 Ovens

Among the pyro-objects of the household (Gheorghiu 2005c) the oven was the most significant, since its form and functioning copied those of the house (see Șerbănescu 1997:250, fig. 3/6). The building process involved the plaiting of a twig trellis which was later covered with clay mixed with chaff and it was carefully finished with a coating made of fine clay mixed with dung, chaff and water.

An oven needs to have an aperture on one of its sides to create an efficient air-draught for maintaining the combustion inside it.

The oven was positioned on the right side of the main room as seen in architectural clay models of the interior of the house (see Todorova 1982: 40, ill. 24) and in the archaeological records.

3.4 The Burning Process

In the Chalcolithic settlements of South Eastern Europe there is a high frequency of burned houses. The destruction of these houses is considered by some archaeologists to have been intentional, particularly because there is evidence of human intervention in the burning process (Bankoff & Winter 1979; Tringham & Krstić 1990, Tringham 1992; Stefanović 1997, 2002; Chapman 1999). To check this hypothesis, in my experiments I tried to identify such human intervention (Gheorghiu 2005a, c; 2006a; 2007a, b; 2013; Gheorghiu & Dumitrescu 2010; for burned houses in another prehistoric region see Rasmussen 2007).

From the archaeological evidence on burned houses in South Eastern Europe prehistory John Chapman (1999: 116 ff) has proposed nine criteria for identifying what he believes to be deliberate burning:

1. The selective burning of perimeter walls (Marinescu-Bîlcu et al. 1997: 66 sq.);
2. The presence of “ignition points” which infer the specific origin of the generated fire (Stevanović1997: 373);
3. The absence of burned areas between houses, which infers a separate firing for each house (Tringham et al. 1992: 382);
4. The high temperatures reached at some points are at levels too high for accidental fires (Tringham et al. 1992: 382; Stevanović1997: 364 sq.);
5. The variance in temperatures reached in each of the different houses infer the setting on fire of each house in turn and not of the entire settlement (Russell 1997: 77; Stevanović1997: 364 sq.);
6. The use of extra fuel to reach the high temperatures (as supported by Bankoff and Winter’s (1979) experiment);
7. The formalization of the houses’ interior layouts prior to destruction;
8. The presence of ritual deposits in houses, e.g., the funerary ritual performed in houses (Raczky 1982-83), which may have had a symbolic significance like

the burial of corpses. Examples from Gumelnița-Karanovo VI-Kodzadermen: at Gumelnița tell (Dumitrescu 1925: 38), Hotnitsa (Angelov 1961), Junatsite (Mazanov 1992: 258) or Dolnoslav tell (Raduncheva 1996) support this assertion;

9. The large number of objects burnt also infers a special accumulation of goods (Horvath 1987; Raduncheva 1996).

While experiments have invalidated some of the criteria mentioned, there is support for the hypothesis of a deliberate action of destruction which will be discussed from the perspective of experimental archaeology.

The burning down of the house could be considered to have been a *rite of passage* both for the house owners and for the community; a symbolism that remains still obscured to the contemporary archaeologist. Some basic meanings may be inferred if we observe the process in the technological paradigm of prehistoric technology: the transformation of clay into ceramics through a process of firing, the use of air-draught to produce this process, and the construction and deconstruction of ceramic objects (Gheorghiu 2001; 2002a, b; 2005b; 2007b; 2010b). All these processes were present in a cyclical form in the material culture of prehistoric societies of South Eastern Europe, and are well illustrated in the making of tell-settlements (Gheorghiu 2006b; 2008; 2013).

Accepting the existence of a technological and symbolic isomorphism between different levels of material culture (as for example between the making and breaking of figurines and the construction and demolition by fire of houses), one can accept that the burning of some of these houses was the result of a symbolic action. But this phenomenon should not be generalized, because some of the burned houses may have been the result of inter-settlements conflicts (Lazarovici & Lazarovici 2007) or of accidental fires, which were quite common in traditional societies (see Pyne 2001: 106).

3.5 Burning the House: A Reverse Process of Construction

Bankoff and Winter's (1979) unsuccessful attempts to burn down a wattle and daub abandoned house demonstrates the difficulty in igniting an architectural object coated with clay. A fire set inside a wattle-and-daub house would extinguish itself after consuming the organic materials inside it, leaving the rest of the house intact. Experiments showed that a strong air-draught combined with a large quantity of fuel with high heat content (see Rehder 2000: 30) is needed to increase the temperature inside the house to a level that would produce the ignition of the ligneous structure of the walls and ceiling.

The analogies between the form of the oven and that of the house may be explained, beyond symbolic reasons, by the fact that a house could create a comparable air-draught due to its lateral and upper functional openings. A moderate air-draught would have existed in every house, in order to keep the pyro-instruments functioning and to evacuate the smoke. Consequently, by increasing the intensity of this natural air-draught, by creating extra openings (Tringham et al. 1992; Stevanović1997: 373), one could raise the temperature of the combustion inside the house from 700°C, the temperature of an open fire, to higher temperatures that transform ceramics into scoria, as some archaeological finds show.

If the clay protection of the walls and ceiling has fissures, or if it is not too thick, even an open fire can start the ignition of the ligneous material; it may be concluded therefore, that intentionally damaging the coating layer of clay would speed up the burning process of the house.

Because the burning of the vegetal covering of the roof is the most dangerous for the settlement (as shown by the long distances the flames reached during experiments), one can infer that the roofs of intentionally burned houses would have been dismantled before being ignited. The heat produced inside houses without ceilings would rapidly decrease and the fire would only successfully consume the ligneous structure of the roofs. A similar situation also occurs after the collapse of the ceiling, because, even if this did not quench the fire, the heat produced inside the built perimeter would be lost without the successful combustion of the walls. Consequently, a controlled and good burning of a wattle and daub house would have involved the solution of causing the walls to collapse on the fire set inside, thus creating optimal conditions for heat containment and efficient air-draughts. Inside such a structure that resembled an oven or a kiln, the burning process could have been controlled and made to last longer, and could have simultaneously successfully transformed a large quantity of clay into ceramics.

It is this comparison between the burning in kilns and the combustion of houses that opens up a new perspective for future experimental work, since the time duration required for burning a wattle and daub structure is essential, and has not yet been experimented with properly.

Taking into account that the foundation trenches produced a solid support for the walls, and that a fire set inside a house would need a couple of hours to be able to collapse these well-fixed walls, one can infer the possibility of these collapses having been an intentional act in order to control and speed up the process to burn as much material as possible, by quenching the combustion (see Lazarovici & Lararovici 2007: 173-4).

Wattle-and-daub architectural features start a process of anaerobic burning when they come into contact with fire, a pyrolysis which transforms the ligneous material into charcoal (Rehder 2000: 28) as some of the excavated wooden platforms show. If continued, and if supported by an air-draught, this process then transforms into aerobic burning which consumes the inner wooden structure.

Experiments show that after the cellulose material of the inner structure was consumed, the resulting channels functioned as air-draught tubes *inside* the clay material of the house, raising the temperature of the open fire and producing an homogeneous burning of the architectural object.

The high temperatures sometimes reached over 1000°C (see above criteria 2, 4 and 5) and produced slag and vitreous material (Fig. 3.8); these temperatures could have been the result of strong air turbulences. These would have been air-draughts that raised the temperature in the channels formed by the voids created by the burning of the structural wood, or by the collapse of the walls. Because they are of a higher density than the rest of the burnt clay, these tubes have been better preserved in the archaeological record; as a rule they break along their length and preserve the imprint of the ligneous form. (Fig. 3.9)



Figure 3.8: The burnt house.



Figure 3.9: Different state of preservation of the burnt construction.

One well-known case is that of the “clay column” from Căscioarele (see Dumitrescu 1970), which can be explained as being the ceramic crust that resulted from the combustion of an inner pole.

Even if the levels of the burning of tubes may serve as an index of the direction of the air-draught (the slag is formed at the exit of the air current), this still does not identify the “ignition points” (see criterion 2), or the path of combustion. The temperature differences apparent among different burnt houses, mentioned in criterion 5, are due to their positioning in the dense settling of a tell-settlement and, subsequently, to the differences in the intensity of the air flow.

A comparison of the volume of the initial architectural features with the ceramic material discovered in excavations reveals that a part of the building material, which was not in contact with fire, would have been washed away by weathering, or would have created amorphous layers of clay. The dynamics of the collapse of the walls to quench the fire (the last one being far from the source of heat), could also explain the “selective” burning of the perimeter walls (see criterion 1).

3.6 Conclusion: The Importance of the Experimental Approach

The intent of this present text is to demonstrate that the complexity of the subject required an experimental approach in order to gain an understanding of the prehistoric technological paradigm within which the burning of houses took place.

A primary role of the experimental archaeology in the case of the burning of wattle-and-daub Chalcolithic type houses was to confirm or refute the observations and hypotheses proposed by archaeologists, by comparing the results of the excavation of real houses with the data provided by the processes of building, burning and excavating the remains. A secondary role was to increase the awareness of the researcher to the behavior of materials in their normal state, as well as during and after combustion. That is, to observe all the stages of the dynamics of burning, collapse and weathering.

An eloquent example was the understanding of the air-draught process in various pyro-objects, and the consequences of burning on the materiality of different objects.

By reproducing in three dimensions the data of the archaeological plans the result was the production of quite robust architectural objects whose life span could have been measured in decades, a reality contradicted by their relatively short actual period of use (see Ştefan 2010: 58). Therefore their deconstruction seems to have been, in most cases, the result of an intentional action, whose meaning may not be understood from the archaeological record or from experiments. What experiments revealed was the human involvement to *control* fire (from the design of the house to the actions during the combustion).

The experiments allowed us also, not only to imagine, but also directly to experience the original architectural spaces and to better follow the processes of transforming a tridimensional object into a bi-dimensional one. (Fig.3.10).



Figure 3.10: The result of burning processes.

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4 Tărtăria Tablets: The Latest Evidence in an Archaeological Thriller¹⁷

4.1 The Background: The Script-Like Signs Found at Turdaș and Vinča, Troy and Knossos

At the end of the nineteenth century and during the early decades of the last century, distinguished archaeologists, historians, linguists, epigraphists, and philologists spent much energy debating the issue of the existence of a script developed in ancient times in the middle and lower Danube basin. Shards and objects found at Turdaș, Vinča or other Danube-Balkan settlements were clearly inscribed with signs of some sort of writing, which led scholars to search for links between South-Eastern Europe and the more “civilized” regions of Mesopotamia, the Levant and eastern Mediterranean areas. This assumption was consistent with their classical education and with prevalent ideas at that time about the spread of cultures from the south-east to the north and west. Yet the precocious specimens of a European writing could not be related to the Neo-Eneolithic times due to the lack of reliable dating methods.

The pioneer of the Danube-Balkan approach to writing as early as 1874 was Baroness Zsófia Torma. Collecting artifacts from the Transylvanian site of Turdaș¹⁸, beside the river Mureș¹⁹ which flows into the Tisza, a tributary of the Danube, the Hungarian archaeologist recovered many extraordinary female figurines, pots, artifacts made of stone, bones, as well as marble and fragments of pottery bearing strange signs. The excavations encountered obstacles because of the peasants’ superstitions that the exhumation of the prehistoric vestiges could cause natural calamities and put the harvest at risk. Nevertheless Baroness Torma inventoried around 11,000 finds of Turdaș group, among which over 300 appeared clearly incised or painted with pictographic writing but also included abstract and linear characters.

The settlement of Turdaș was subsequently excavated by M. Roska in 1912 (Roska 1942) and Sabin Luca (Luca 1997, 2001, 2003a, 2003b, 2005). The site is currently more than 3-4 hectares and no more than 40-50% of the surface is actually disturbed.

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¹⁷ This article displays some results of the “Tărtăria Project” promoted by the Prehistory Knowledge Project at EURO INNOVANT and carried on by the authors.

Marco Merlini and Gheorghe Lazarovici are the authors of the photos appearing on this article.

¹⁸ In Romanian language, Tordos in Hungarian.

¹⁹ Maros in Hungarian.



Figure 4.1: The settlement of Turdaș is nowadays more than 3-4 hectares and it is actually not disturbed for more than 40-50% of the surface.

Torma presented her discoveries at Turdaș and Valea Nandrului, where she gave special attention to the issue of the signs and compared their shapes to similar ones found in Asia Minor (Troy, Caria, and Panfilia) and Cyprus (Torma 1879; 1882: 19-44; after Laszlo 1991: 43). Later, in a collective publication, she focused primarily on Mesopotamia and claimed to have identified “Babylonian cultural elements” at Turdaș; she specifically interpreted some inscriptions as names of Sumerian divinities (Torma 1902). Unfortunately many of the signs and the unusual artifacts from Turdaș and Transylvania are known solely from the unpublished but meticulously illustrated notebook of Zsófia Torma where she hypothesized the existence of a “Turdaș script” (Makkay 1969; 1990 and bibl. cited there). The discovery of the “Turdaș script” circulated around the world giving even greater prominence what was an already extraordinary excavation due to its extent; this area was, however, unfortunately flooded by the river a few years later, which drastically reduced its size.

Apropos Troy, from 1870 where Heinrich Schliemann found signs incised on vases and spindle-whorls (Schmidt 1902; Renfrew 1970: 45) which suggested to him a comparison between the Turdaş script and inscriptions on Minoan vessels (Schmidt 1903). Since 1896 similar signs have been identified on pottery from Phylakopi in Melos Island (Society for the promotion of Hellenic studies 1904). William Matthew Flinders Petrie found comparable marks on vases of the late Predynastic and Protodynastic periods in Egypt (Petrie 1900). Arthur Evans also extensively studied Turdaş signs. Having discovered similar marks carved on blocks of what was evidently a Bronze Age palace at Knossos (Crete) and on clay tablets inscribed with writing, he concluded that the Turdaş signs were remnants of a primitive system of writing (Evans 1909; Mosso 1910).

Subsequently, between 1908 and 1926, Miloje M. Vasić excavated the tell of Vinča, on the south bank of the Danube 14 kilometers from Belgrade, as well as other settlement mounds nearby where he unearthed numbers of statuettes and vessels bearing geometric motifs which reminded him of the inscriptions found on the archaic Greek vessels from Lesbos, Troy and Melos. From these he made the reasonable assumption that the “incised signs and marks” on the artifacts held at Vinča in a complete block of households with a fascinating stratigraphy of almost 10 meters, belonged to an early Greek colony of the 7th and 6th centuries BC, such as those of southern Italy (Vasić 1910). He also took for granted that some of these incisions were letter signs; a presumption historically justified by the parallels—both graphical and conceptual—he made between these and archaic Greek signs. Vinča is only 200 km. from Turdaş in strict line. The valleys of Mureş and Tisza provide the easiest routes of communication between the two regions. Vinča and Turdaş shared a common culture and comparable signs were recognized on pottery from both sites. Vasić concluded that the almost similar graphemes found at the two settlements could have been influenced by Minoan and Near East signs (Vasić 1932). This was the coinage of the “Vinča script” (Winn 1981; 2004; Starović 2004).

From the outset of studies on the literacy of earliest civilizations, the signs of Vinča and Turdaş, as well as those of Troy and Knossos, had been considered isolated marks incised on the underneath of the bases or low on the sides of the vases and interpreted as potters’ or owners’ marks. However a number of scholars immediately noted that at times the Trojan signs appeared in groups and, as early as 1874, a form of Greek language was extracted from them. Scholars also noticed the occasional occurrence Turdaş signs in groups like the Trojan inscriptions and their similarity in shape to writings in Crete and Egypt (Schmidt 1903). Therefore, it became a mainstream supposition that they might not just reflect the existence of masons’ or owners’ marks but might be a rudimentary system of writing. On this basis H. Schmidt published a risky conversion table between the newly discovered signs and their pre-supposed sounds (Schmidt 1903). In 1927 Gordon Childe stirred up attention again when he pointed out the resemblances between signs found on pottery from

prehistoric settlements of Vinča and Turdaş and literacy in Predynastic Egypt and at Troy (Childe 1927: 83, 88e). After this, interest in the Danube-Balkan signs dwindled. Childe himself in his later years avoided the question of the Vinča script.

4.2 Tărtăria Tablets as the Icon on the Possibility of a European Neolithic Writing

Although evidence of same and similar signs had been known and investigated since the excavations carried out in late 19th and early 20th century at the important prehistoric sites of Turdaş, Vinča and others, it was the discovery in 1961 of three inscribed tablets at the settlement of Tărtăria (near Turdaş, in Romania, Alba county; see Moga 1995) that became the icon of the Danube Script²⁰ and the Danube Civilization. Indeed the Transylvanian finds kindled a wave of controversy regarding both the spatial incubators and temporal sequence of South-eastern European prehistoric civilization. They also made real the possibility that Neolithic and Eneolithic cultures of South-eastern Europe might have expressed an early form of writing predating the Near East regions by 1000-2000 years. These finds refuted the assumption that the center of writing development or the signs used for it might have been Mesopotamia; it opened up the possibility that this invention could have been developed much earlier than about 3000 BC.

However the virulence and centrality of the discussion on Tărtăria evidence cannot be properly understood if one does not consider that the stakes were even higher than the issues mentioned above. The very effectiveness in dating of the 14C analysis and on its basis the “reconstruction of the archaeological chronology in general” (Neustupný 1968b: 32) was also implicated. It is worth remembering that at the time of the Tărtăria discoveries the beginning of the Starčevo-Criş culture was estimated to be about three millennia after the present findings i.e. 3400 BC (Grbić 1955: 25, 27; Benac 1958: 41, and others) and the 14C dating method was still rather imprecise. The radiocarbon

20 We employ “Danube signs”/“Danube script” as general term and “Vinča signs”/“Vinča script” as strictly limited to the Vinča culture which developed in the central area of the great Danube basin. This terminology is coherent with the challenge to demonstrate that “early civilization” status can no longer be limited to the regions which have long attracted scholarly attention (i.e. Egypt-Nile, Mesopotamia-Tigris and Euphrates, the ancient Indus valley), but it must be expanded to embrace the Neo-Eneolithic civilization of the Danube basin. The script is only a mark-although important-of the high status of the civilization which flourished along the Danube River. The Danube script originally appeared in the central Balkan area and had an indigenous development. It quickly spread to the Danube valley, southern Hungary, Macedonia, Transylvania and northern Greece. It had a cousin script in Cucuteni-Trypillia area (Merlini 2004c). The Danube script flourished up to about 3,500 BC when a social upheaval took place: according to some, there was an invasion of new populations, whilst others have hypothesised the emergence of new elite (Fig. 2). At that time a specific script appeared and developed in south-east Neolithic and Chalcolithic Europe, but it was later to be lost.

method, developed by Willard F. Libby of the University of Chicago and widely used in the fifties, for example, ignored the influence of the changes of Earth's magnetic field upon the production of radiocarbon. In such a fluid und unsettled situation the Tărtăria tablets played the role of a unique occasion on which some scholars tried to solidify ^{14}C dating as a standard method while others sought to discard it as useless and misleading. Still in 1965 Vl. Milojević and in 1967 Sinclair Hood, discussing the Transylvanian finds as a glutinous occasion for rejecting the ^{14}C date for the Vinča culture, observed that ^{14}C dates for cultural stages in historical Egypt, Mesopotamia and the Aegean were often accused of being too late then too early (contrary to the Vinča date) because he did not consider their correction on the basis of the influence of Earth's changing magnetic field on the production of radiocarbon (Milojević 1965; Hood 1967).



Figure 4.2: The group of the three inscribed tablets from Tărtăria.

4.3 A Pivotal but Questionable Discovery

4.3.1 Four Stages for an Investigation

Tărtăria is a rural Transylvanian village of 5,000 inhabitants in the Western area of Romania famous in Roman times for its gold mines.



Figure 4.3: Tărtăria and the way to gold mines from West Mountain.

The prehistoric settlement mound of Tărtăria-Groapa Luncii is not very far from the copper and gold deposits of Zlatna region and some 18-20 kilometers from two important Neolithic settlements: Turdaș and Alba Iulia-Lumea Nouă.

Tărtăria-Groapa Luncii is located near the railway station “Tărtăria”, on a small promontory 300-350 meters long and 150 wide which is 15 meters high on the Mureș River and is orientated E-W. Some time ago, a branch of the Mureș River flowed under this mound receiving fresh water from a small stream and other springs, all sourcing out from the high terrace of the settlement river which was very much eroded in time by floods. The Tărtăria mound is located inside an intensely cultivated area just 500 m. from another Neolithic settlement, Balomir-Gura Văii Cioarei (Vlassa 1967: 404-408; 1969: 513-540; 1976: 114-118), famous for one of the first evidence of utilization of metals (Vlassa 1976: 118)). Unfortunately amateurs do not have to exert much effort in rummaging the soil to unearth out shards, fragments of statues, remains of altars, etc.



Figure 4.4: The location of the prehistoric settlement of Tărtăria.



Figure 4.5: The settlements of Tărtăria and Balomir.

Tărtăria-Groapa Luncii is a main Neolithic site with the cultural strata approximately between one and three meters thick with pit houses in sector section G from N. Vlassa, reaching a depth of four meters in some places. Four layers have been uncovered. According to the traditional stratigraphy, the deepest layer, thin and interrupted, has Starčevo-Criș²¹, Vinča A, Vinča B1, Alföld Linear pottery (Makkay 1974/5: 14). The third, from bottom to top, 1 m. depth was a Vinča B occupation and presents surface dwellings (Vlassa 1976: 29). The second was considered by Vlassa belonging to the Petrești-Turdaș culture (Vlassa 1976: 30). The upper stratum was ascertained to the Coțofeni culture related to the Baden and other cultures, probably Indo-European populations which replaced the Neolithic and Eneolithic inhabitants throughout South-Eastern Europe (Winn 1981: 185). We made a revision of plan and profile in Lazarovici and Merlini 2005-2006.

The Neolithic site at Tărtăria-Groapa Luncii was discovered on 15 July 1906 by Endre Orosz and studied during four stages by various scholars. The discoverer asserted that it was a rich site contemporaneous with the Turdaș settlement and characterized by high-pedestalled bowls and painted pottery (Orosz 1908).

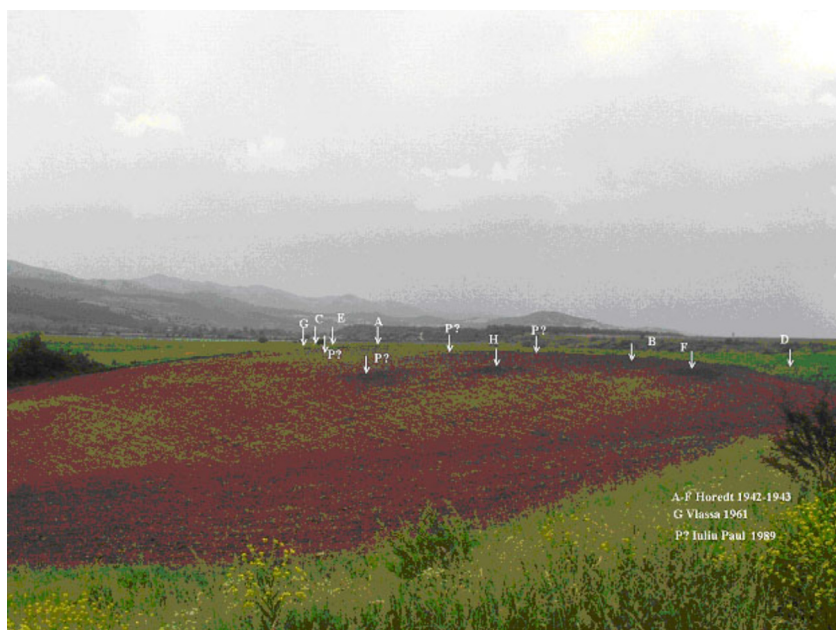


Figure 4.6: The setting of the excavations.

²¹ Remains of this culture are pointed out by the presence of hashed chaff used as a cleanser (Luca 2003: 24).

In the thirties, the settlement became well known when Marton Roska (University of Cluj) accidentally discovered some Neolithic objects similar to that of Turdaş (Roska 1942: 21 n. 77). Tărtăria-Groapa Luncii was for the first time systematically investigated during the war years 1942-3 by Kurth Horedt although the archaeologist carried out only an informative dig, excavating a limited area in the north-western sector of the settlement and writing a brief preliminary report exclusively for limited circulation (Horedt 1949).²²

Nicolae Vlăsa (archaeologist of the National History Museum of Transylvania at Cluj) did a survey excavation in 1961 accompanied by Iuliu Paul and Attila Laszlo (Vlăsa 1962.23-30; 1963. 485-494; 1976. 28-43).²³ His main purpose was to study in detail the stratigraphy of the neighboring site of Turdaş using information from the culturally paralleled Tărtăria-Groapa Luncii. In fact the enormous collection of Turdaş finds accumulated in the past by Transylvanian museums lacked any stratigraphic detail and the artifacts inventory had been made only by their typological and stylistic features. A stratigraphic analysis of the Turdaş culture was no longer possible in the eponymous settlement because it has been carried away by the Mureş River, but it was still available in Tărtăria-Groapa Luncii which belonged to the same culture.

Finally, Iuliu Paul (University of Alba Iulia) carried out the last systematic investigation in 1989 continuing with the excavation in the north-western area of the settlement and extending the research both to the central and eastern area of it. In particular he dug 50 cm. from Vlăsa's trench recovering the fire place and many pits going down from the upper levels but not to the ritual pit. Unfortunately he did not publish the report.

4.4 A Magic-Religious Complex Discovered and Lost

In 1961 25-year old Vlăsa recovered from a pit three little, inscribed plates of baked clay together with a pile of offerings which were associated with the bones of a mature human being, estimated to be 35-40 years old (Vlăsa 1963: 492). The excavator immediately cautioned that "the find being quite recent, we can as yet offer only some general remarks about its meaning and importance" (Vlăsa 1962: 27). But year after year on different occasions he published the same content of the preliminary report (Vlăsa 1963, 1970, 1976, 1977) and after 14 years he continued to alert the reader to the circumstances that he was offering only some general remarks because of the novelty of the discovery.

²² Gheorghe Lazarovici has recently re-discovered Horedt's excavation journal and he is analyzing them.

²³ He carried out his investigation in areas G and H, then he extended it in the area C of Horedt's survey.

Here is in synthesis the evocative scenario outlined by the archaeologist in charge (Vlassa 1962; 1973; 1976, 1977):

1. a cultic offering composed by objects and bones lay at the bottom of a ritual pit which was located in the deeper layer (Vlassa 1963: 490), in the sterile loess, from the first and oldest cultural level (Vlassa 1976: fig. 3.4; 1977: 13);
2. the bones appeared “scorched and disjointed, some of them broken” and they belonged to an individual about 35-40 years old;
3. the pit was evidently a “magic-religious pit... filled of an ashy earth”; the pile of objects found at the bottom of it was a “sacrificial offer”;
4. the discovery was “the only magic-religious complex... of this kind in the Turdaș culture areas”;
5. the dead person was someone involved in magic and religion who was cremated during a sacrificial ritual;
6. the burnt, broken and disarticulated bones were “the remains of a sacrifice, accompanied by some kind of ritual cannibalism” (Vlassa 1976: 31);
7. two of the tablets are rectangular, one is round. The first tablet “has the form of an irregularly rectangular plate, measuring 5.2 x 3.5 x 1.6 cm.”²⁴ The second, similarly shaped and slightly convex in section, “bears a round hole and measures 6.2 x 3 x 0.9 cm.”²⁵ The third, “discoid and pierced by a round hole measures 6.1 x 6 x 2.1 cm.”²⁶ Signs are inscribed on the tablets only on one face. The archaeologist made note in the excavation report that one tablet “bears a (hunting?) scene, and the two others extremely curious signs placed on several rows” (Vlassa 1963: 490);
8. the signs incised on rows on the tablets “may be taken for a rudimentary writing... at least the rudiments of an ideographic notation” (Vlassa 1963: 492).
9. the hoard of offerings which accompanied marked plates and human bones consisted of 26 burned-clay statuettes-or their fragments-with triangular head and cylindrical-or-prism-shaped body, two Cycladic-like alabaster idols and a Spondylus shell bracelet; the pile of offerings accounted in total 32 objects, tablets included.

Vlassa published only 11 of the impressive finds belonging to the ritual complex, tablets included, while in the inventory of the museum he listed 12 objects under the address “groapa rituală” (Fig. 4.7). The other objects are still unpublished and the main regret is that most of them are not even findable. In the National History Museum of Transylvania at Cluj the showcase dedicated to the Tărtăria ritual complex displays only 10 artifacts: the copies of the three tablets, five clay figurines, one alabaster statuette and the bracelet.

²⁴ Actually it measures 5.3 x 3.6 x 1.15 cm.

²⁵ Actually it measures 6.3 x 3.15 x 0.85 cm.

²⁶ Actually it measures 6.1 (height) x 6 (large) x 2.1 cm.

Inv. Nr.	Inv. Nr. Muzeu	Descrierea obiectului (descrierea)	Locul de proveniență	Epoca	Material	Formă	Observații
P. 100	2. 1000	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 101	2. 1001	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 102	2. 1002	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 103	2. 1003	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 104	2. 1004	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 105	2. 1005	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 106	2. 1006	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 107	2. 1007	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 108	2. 1008	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 109	2. 1009	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 110	2. 1010	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 111	2. 1011	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	
P. 112	2. 1012	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	„Săgețică de lemn”	

Figure 4.7: The page of the inventory of the National History Museum of Transylvania at Cluj which lists 12 objects under the address “groapa rituală”.

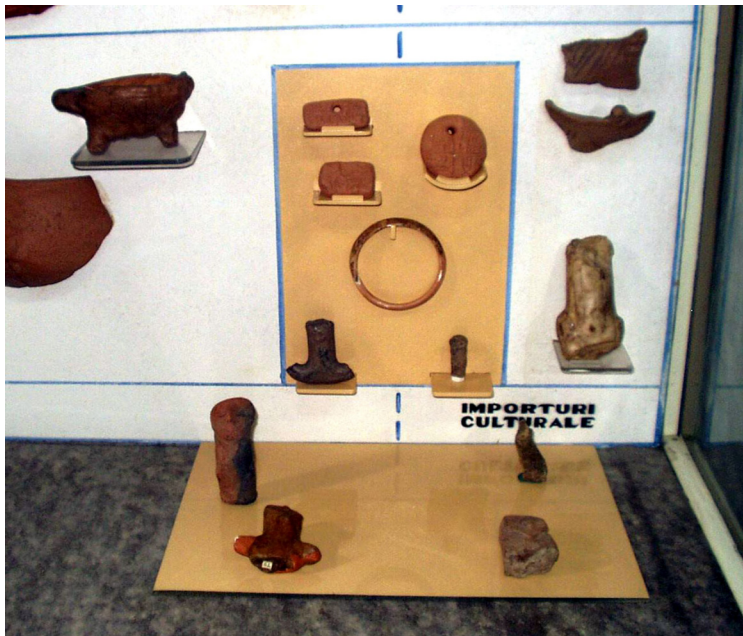


Figure 4.8: The group of the Tărtăria artifacts in a showcase of the National History Museum of Transylvania at Cluj.

Making a systematic search in the storage rooms of the museum in order to try to find the missing artifacts belonging to the ritual grave, we have found one more object certainly belonging to the pit and one uncertain in its origin but it is presumable that it also belongs. All the pieces are broken, intentionally and possibly ritually, and deposited in the pit as incomplete items. Only the tablets are entire and bedded as complete items.

Broken objects:

I) A fragmented figurine (head and shoulders).²⁷

The first figurine is schematically shaped, has truncated arms, and has rectangularoid head and triangular mask typical of Vinča A art canons: two long strokes for eyes, prominent nose, and an elaborate coiffure at the top of the head made by parallel grooves within triangular patterns.²⁸ (Fig. 4.9)



Figure 4.9: Intentionally broken male figurine with truncated arms, rectangularoid head and triangular typical Vinča A mask.

²⁷ The inventory number is P420, considered merely a head. It was published in Fig. 6.1 from Vlassa 1963.

²⁸ The inventory number is P412. It was published in Fig. 6.2 in Vlassa 1963.

The statuette is 7.2 cm high and 7.0 cm. large, arms included. It is possibly a male due to absence of breasts and typology of hairstyle. The matter is quite fine, with little sherds embedded inside. It was fired at higher temperature than the prismatic figurine that we analyze below, but for less time and it is still gray colored inside. It was heavily restored and saturated with lacquer but it is possible to glimpse its original brawn color and the fact that it had angoba on the surface. The statue was first covered by red ochre and then with yellow one (Fig. 4.10).²⁹



Figure 4.10: The statuette was covered by red ochre and then with yellow one.

The mask is 3.2 cm. high and 3.0 cm. large at the top. It is asymmetric towards its left as the other figurines from the ritual grave are. The rectangularoid head has an extension in depth of 2.5 cm. The craftsman first made the big triangle, then the 7 lines inside it and finally the remaining decorations that might represent the hair (Fig. 4.11). Only one of the truncated arms was broken, the other is original.

²⁹ It is very clear on the mask.



Figure 4.11: The craftsman made on the rectangularoid head of the figurine the big triangle, then 7 lines inside it and the remaining decorations which might represent the hair.

In Danube civilization, figurines with single or double features in common with the Tărtăria figurine have been found but are not completely comparable. Similar triangular masks are known from Vinča at 8.5, 8.4 and 8.1 meters (Vasić 1936 III Pl: V, 18, XII, 53, XX, 103), Gornea, Vinča A (Lazarovici 1979. pl. XX/A4, B1-4), Zorlențu Mare, Vinča A3-B1 (Ibidem XX/D1-3, 9; H1), Vinča B2 (Ibidem XXI/J 9,17) and B2/C (Ibidem XX/B17), at Balta Sărată, Vinča B1 (Lazarovici 1979, XX/I 5-6)18, Parța, Banat culture-Vinča B (Ibidem XXI/G7, 10, 11), Liubcova, Vinča C (Ibidem XXII/1), Turdaș (Roska 1941: Pl. 138,10)³⁰, Jela (Winn on-line a: fig. 2 e-f), Ruginosu. Concerning similar eyes, they have been discovered in Vinča B1 at Liubcova; in Vinča B2-C at Selevac (Tringham R., Kristić D., Selevac. 1990: 406 fig. 11.7d).³¹ Two statuettes from Zorlențu Mare, situated half way between Turdaș and Vinča, are analogous with the Tărtăria statuette with the features of both eyes and arms (Comșa and Rauț 1969: Fig. 3, 6). They could be synchronized with Vinča B1-B2.³²

³⁰ The figurine is from Vinča A3-B1 culture. Only the mask is similar. The head is triangular.

³¹ From the east area, house 1.

³² They could not be synchronized with Vinča A2-B culture as Comșa and Rauț did, because they have been discovered in layers 2 and 4.

II) A clay statuette, prismatic shape, deliberately (?) broken.³³

A second fragmented figurine has a prismatic shape. The fragment is deeper than it is large, measuring 6.6 x 3.5 x 3.8 cm. After the head dimensions, it might be a part from a house altar, initially its height was 16-25 cm; aside from high-pedestalled bowl, this is the largest discovered object. (Fig. 4.12) The material is not very fine and includes some little sherds³⁴ behind the head and on the right side of the neck. (Fig. 4.13) The statuette was hard fired for a long time and uniformly cooked. It was not finished with hands but rather with a wooden tool which was also employed to engrave the decorations. It was not polished but it was just cleaned with hands or leather. In the incisions on the body, on the mask and on the right eye there are traces of a black color. Eyes were made by impressions of a fingernail and fingertip. On the left eyebrow and on the top of the head there are traces of a red painting. On the left side, on the same part on the mask and in a few places on the body there are traces of yellow ochre painting. It is not very clear if the statuette has female or male gender: the lines of the breasts are not evident at all but according to our contemporary standards it is wearing female accessories (probably earrings) and clothes (a striking tunic with V patterns in front and on back).



Figure 4.12: Deliberately (?) broken feminine figurine of prismatic shape.

³³ The inventory number is P412, considered merely a head. It was published in Fig. 6.2 from Vlassa 1963; Maxim 1991: 177, Kat. 96.

³⁴ One contains more mica than the others.



Figure 4.13: The material of the prismatic figurine is not very fine and includes some little sherds behind the head and on the right side of the neck.



Figure 4.14: Eyes of the prismatic statuette have been made pressing fingernail and fingertip.



Figure 4.15: The prismatic figurine was completely painted, mainly in red and partly in yellow.

The head was not modeled separately from the pillar-shaped body; therefore the face is on the upper front of it. It is obvious that it is wearing a mask, due to the marks of its application on the face, the large stroke-fissures for eyes, and the pentagonal flat shape of the face. The craftsman started to drill a hole on the far lower area of the mask, but did not complete the hole and the cavity is only hint. The mask has been deformed under a deliberate torsion from its right to left caused by force applied to it while the clay was still soft. The twisting affect was applied at the center, at the nose and served to skew the oblong fissure for the eyes a horizontal line of horizon, leaving its left eye higher than the right. It did not, however, distort in the same measure the outline of the mask. Was the deformed shape of nose and eyes due to the intention of representing a particular mythical personage? In ethnographic record several masks occur which, employed in ceremonial rituals, depict mythological beings, the spirits of dead ancestors as well as deities and other beings believed to possess power over the living. Or was the disfigured mask wore by the statuette from Tărtăria, as well as its fragmentation, a mark of the passing away of a person (perhaps the human being who has been buried with the ritual pile of objects)? Or was even it the result of a practice that we nowadays consider typical of malevolent actions made during “black magic” rituals?

Other symbolic elements are evident on the figurine from Tărtăria. At first it was completely painted, mainly in red and partly in yellow. It is not without significance that the mask is bicolored and pigmented with incrustated painting.

Close examination of the statuette reveals eight holes through six perforations made before firing: two and two punctures are communicant and one can easily image the statuette wearing two large circular earrings or being suspended over an altar. Two deep perforations have been made obliquely on the back of the head and possibly there were originally three. The craftsman was not very sure about the angulation and direction of the perforations and made more than one attempt. The holes over the armpits are interesting in that they were possibly filled with a stick in order to raise and sustain orante arms which were broken during a ritual or perhaps this function was simply to permit the change of a type of arm with another. (Fig. 4.16) There is an obvious connection between the above mentioned symbolic features of the figurine and the fact that it was deliberately broken, but the reason for this is still obscured.



Figure 4.16: The holes over the armpit were possibly filled with a stick in order to raise and sustain orante arms or to permit the change of a type of arm with another.

Pentagonal mask and slit eyes of the prismatic figurine are reminiscent of those on figurines from early Vinča and Miložčić claimed on this basis that they support the date for the tablets in Vinča A (Miložčić 1965: 264, 268). According to Makkay there exist such impressive parallels to those of Turdaş (Roska 1941: Pl. 138,5, 11) that he speculated they were fashioned by the same craftsman and, noticing the very early date of this typology figurine at Vinča (Vasić 1936 III: Pl. VI, 22), he conjectured

that it might have been a prototype for the Mureş examples (Makkay 1974-1975: 18). Unfortunately most of the statuettes cited by Makkay do not have a prismatic shape.

III) A fragment of an idol face.³⁵

Vlassa assumed that a partial naturalistic human face was actually a fragment of a pot (that is, an anthropomorphic pot with a human face), or that it was maybe a container for holy liquid, and a lid by other authors (Makkay 1969). However it is in fact the upper part of a cylindrical figurine. The statuette is wearing an oval mask typical of Vinča A art criteria. It measures 4.1 cm. x 3.55 cm. and presents two long strokes for eyes (indicative of a mask). Similar finds have been discovered at Zorlenţu Mare, Vinča B1-B2 (Lazarovici 1979, XX/D5; H7, 11-12).³⁶

The figurine from Tărtăria exhibits a hole positioned under the mask, upon the chin. Is it another clue of the presence of speaking or singing figurines at Tărtăria ritual grave? The human face of the cylindrical statuette is currently delocalized in another section of the showcase and is not in place with the other objects of the ritual grave. (Fig. 4.17)



Figure 4.17: A partial naturalistic human face which has been mistaken for a fragment of a pot or a lid with human face.

³⁵ The inventory number is P416. It was published in Fig. 6.3 in Vlassa 1963; Maxim 1991: 177, Kat.

³⁶ According to Makkay (Makkay 1974-5: 18), similar artifacts have been discovered at Turda (Roska 1941: Pl. 102, 14, 19; Pl. 103, 18) but they are all lids.

IV) A bracelet.³⁷

A bracelet, made of *Spondylus* shell, measures 8.7 cm. in diameter and is 0.8 cm. thick. It came from the Aegean Sea. The craftsmanship is standard and the object was not very well polished. Unfortunately the restoration process was very invasive, but still now it is possible to discern that the bracelet fitted a minute wrist, that it was worn for a long time and that it was deliberately broken, not accidentally during a ritual or in the defleshment process or due to the secondary burial. Instead, it was broken down exactly in the middle with an abrupt action. *Spondylus gaederopus* shell was a typical luxury good in Neo-Eneolithic times with routes from South to Central Europe (Childe 1949: 118; 1964: 87; Pittioni 54.1: 20, 51-52; Quitta (18) 1960,2: 166-67; Raczky 1948: 96-98; S. Vencel 1959: 739-742 verifying 111 sites; Horedt K. 1970: 103-104, fig. 7 map), in Vinča culture at Botoș necropolis (Nandriș 1976: 64), in Greece (Theochares 1973: 188, fig. 116 map).



Figure 4.18: A broken bracelet made by a very perishable material.

V) A fragment of a pendant in form of horns of consecration of a goat.³⁸

Among the pile of the objects there is a fragment of an “idol-shaped pendant” in form of an “anchor” as the term has been conventionally used although any connection with a figurine-shape and with sailing or fishing is highly unlikely. Discarding both

³⁷ The inventory number is P413. It was published in Fig. 6.4 in Vlassa 1963; Maxim 1991: 177, Kat.

³⁸ The inventory number is P414. It was published in Fig. 6.5 in Vlassa 1963; Maxim 1991: 177, Kat.

the anthropomorphic and aquatic suggestions, at the first sight the artifact gives the impression to have been used for holding lightweight material in the weaving process as in Greece at Sitagroi (phase V), Servia, Ayios Mamas, and Dikili Tash. Following Elser's description it is not difficult to image that the shank of this artifact was suspended by a cord or thong slipped through the single hole from a post while "the high upswing of the arms suggests that these could have held supplementary weft threads, reeled off a spindle and then fed from the anchor to the loom" (Elster 2003: 243).



Figure 4.19: A fragment of a pendant in form of horns of consecration of a goat.



Figure 4.20: The "anchor" found at Tărtăria has the perforation running parallel and not orthogonally to the arms. Therefore it is a very unproductive suspended object for the weaving process, but could have been worn as pendant.

Unfortunately, unlike the above mentioned examples, the “anchor” found at Tărtăria has its perforation running parallel and not orthogonally to the arms.³⁹ Therefore, it is a very unproductive suspended object for the weaving process. In fact there are no traces of its use as a tool. In search of another explanation for its use, we discovered that the puncture shuttles are not perfectly parallel to the arms but are rather eccentric by 5 degrees.⁴⁰ It is also significant to note that the object is grey with a yellow angoba, quite refined, made of a very well polished with a bone or a stick, and has a lot of fine sand in its composition. It is reasonable to suppose, as Vlassa did, that it was worn as pendant. Regardless, the lack of wear of the holes testifies that it was worn for long periods of time. The artifact is 5.7 cm. high and 6.2 large. The diameter of the “neck” is 2.5 cm. and the diameter of the hole is 0.627 cm.

However which kind of pendant is an anchor-like shape? We suppose that they were horns of consecration of a goat.

VI) A minute phallus-type statuette.⁴¹

It is wearing a mask with a high crest; it has a prominent nose and large stroke-fissures for eyes. The statuine is 3.8 cm. high and its body is 1.2-1.3 cm. in diameter (it is elliptic). The mask is 1.7 cm. in length and it is asymmetric towards its left like the other figurines from the ritual grave. The cylindrical statuette was finished by hand, not with a tool. For the mask and cylindrical shape see Zorlențu Mare, Vinča B1 (Lazarovici 1979, pl. XX/2+3, H4); and Vinča B2 (Ibidem XXI/B5), Parța, Banat culture (Ibidem XXI/GG1, 3, 11).



Figure 4.21: A minute phallus-type figurine.

³⁹ The perforation was made drilling only from one part, as witnessed by the fact that one hole is larger and more rounded than the other.

⁴⁰ The perforation was made by a drill and a hole is larger than the other.

⁴¹ The inventory number is P419 but on the figurine it was wrongly written 413. It was published in Fig. 6.6 in Vlassa 1963; Maxim 1991: 177, Kat. 93.

VII) An alabaster figurine.⁴²

On a deliberately broken figurine made of gray alabaster and with a little part in marble, one can see human features in the statuette which is also wearing a mask of Vinča A or B type. Vlassa annotated among the artifacts of the pit two alabaster idols “of the Cycladic type with may have analogies with the Aegean world’s plastic”, but the existence of such stone and marble figurines is also well known in early Vinča culture (scepter: Gornea, Vinča A, Lazarovici 1979, XX/C1).⁴³ The Tărtăria statuette is 10.5 cm high and 0.75 cm. thick. Having being cut vertically, its original thickness should have been 1.5 cm.



Figure 4.22: An intentionally broken alabaster figurine.

⁴² The inventory number is P417. It was published in Fig. 6.7 in Vlassa 1963; Maxim 1991: 177, Kat.

⁴³ Another intentionally broken figurine considered “a marble idol of Cycladic type” has been found at Tărtăria by Horedt in 1943. The discovery happened in trench B at a depth of 200-222 cm. It has inventory number IN 14.877. The figurine is 11 cm. high. Hips are very large: 6.1 cm, whereas shoulder are 5.0 cm. and middle bust 4.3 cm.

VIII) A massive statuette of phallus type.⁴⁴

A large figurine of phallus type is possibly one of the “statues with ... cylindrical-or-prism-shaped body”, according to Vlassa. The cylindrical statuette is typical of Vinča art criteria. Similar pieces have been found in Vinča A at Gornea, (Lazarovici 1979, pl. XX/A 4, 10-11, 15), in Vinča B1/B2 at Zorlențu Mare (Ibidem XX/D2) and Balta Sărată (Ibidem XX/K5). It was schematically molded from middle fine clay mixed with some fine mica but rough made, polished only with hands, and refined with a stick of wood which has also been employed to trace the decorations. It was fired at high temperature. The color is brown-red however we recovered traces of a yellow slip on the body. Its left part is black because it was put inside ashes. The figurine is 8.2 cm. tall and it is clearly of female gender due to clues of a breast on its right. The face is round, less high than wide (4.2 cm. x 4.4 cm.), set on the top of the body at an angle of 45 degrees (Makkay 1974-5: 18) and it is asymmetric towards its left similar to the other figurines from the ritual grave.



Figure 4.23: A standing figurine.

⁴⁴ The inventory number is P418. It was published in Fig. 6.8 a and b in Vlassa 1963; Maxim 1991: 177, Kat. 92.



Figure 4.24: A large hole is positioned on the far lower part of the mask of the massive phallus type figurine resembling an opening mouth. Are we in presence of a speaking or singing figurine?

The presence of a mask is indicated by large stroke-fissures for eyes, with marks where the mask is hanging at the face, and the V ornament along the jaw with analogy at Gornea in Vinča A culture (Lazarovici 1979, XX/A4), in Vinča A3-B1 at Zorlențu Mare (Ibidem XX/D9) and Balta Sărată (Ibidem XX/I 5). Two holes are discernable on both sides of the mask possibly for earrings or to enable the figurine to be suspended. Two deep cavities mark the very prominent nose. There is a large hole positioned on the far lower part of the mask that resembles an opening mouth. The hole was made before firing and still now it is possible to distinguish yellow soil inside. Are we in presence of a speaking or singing figurine? (Fig. 4.24) Originally, it had arms but they have been intentionally broken. The bottom is minute but it is sumptuous and the buttocks are well-marked.

Cylindrical statuettes are well known in Vinča A or early Vinča B1 cultures but parallels are not complete for the range of features of the Tărtăria piece. Phallus statuettes have been found at Gornea and Zorlențu Mare (Comșa and Rauț 1969: Fig. 1, 1,4-6, 8-10; Fig. 3, 8), Turdaș (Roska 1941: Pl. 137,13; 138, 7)⁴⁵, Vinča (Vasić 1936 III Pl: X, 38; XIII, 62)⁴⁶, Potporanj (Bruckner 1968: Pl. IV. 1)⁴⁷, and Žabalj in the Voivodina (Bruckner, Jovanović, Tasić 1974. Fig. 42). See also Kalmar-Maxim 1991 and Luca 1991: 177-231.

Entire objects: (IX-X-XI) three inscribed tablets.⁴⁸

A questionable object:

XII) A blacktop

According to an oral communication mentioned by Höckmann, 28 figurines were found in the pit among the sherds of a clay vessel (Höckmann: 1968: 65, 66) and, after a revision of the material from Tărtăria, Vlassa mentioned two channeled fragments of great importance coming from the bottom level of his excavation that were not mentioned in the preliminary report (Vlassa 1969; Fig. 8-9). We do not know their final destination because they did not have inventory numbers but other eight fragments were incorporated in a high-pedestalled bowl reconstructed and kept in the Cluj museum with parallels in early Vinča culture (Vlassa 1969. Fig. 5; Maxim 1991, 177, Catalogue 86). Checking the inventory of the museum, we discovered that the object was positioned inside the range of the finds from the ritual pit: P 415.

Actually Vlassa recovered a fragment of a typical Vinča A3 bitronconic vessel-fine, well executed, in blacktopped technique, hard fired and very well polished-from which he discretionally recreated a high-pedestalled bowl. The blacktop should be 4 cm. less high, therefore its height should be around 24 cm. The cup is 16 cm in diameter at the mouth and exactly half (8 cm) high. It is capable of holding 1,9 liters. The base is 10.6 cm. in diameter and the feet 4. The cup has two protuberances that are not perforated like some other occurrences.

The blacktop was very well used during its life and was then intentionally broken with a tool such as a mace or a stone working from inside. Maybe it was the cup employed during the ceremony after the death of the person buried at Tărtăria and was afterward ritually fragmented and its parts scattered.

⁴⁵ Nevertheless, in the first case the eyes are different and the mask is not rounded as at Tărtăria statuette. The second figurine is more or less similar to the Tărtăria one.

⁴⁶ At a depth of 8.9 and 84 meters.

⁴⁷ The cylindrical shape is the only feature shared by Potporanj and Tărtăria figurines.

⁴⁸ The respective inventory numbers are: P 409 for the discoid piece; P 410 for the perforated rectangular piece; P 411 for the undrilled rectangular piece.



Figure 4.25: The blacktop possibly recovered inside the ritual pit.

An emblematic zoomorphic altar.⁴⁹

Another significant artifact was found at Tărtăria, although not in the ritual pit: a zoomorphic altar with the right side broken. Indeed the zoomorphic altar is the an inscribed cultic object bearing a double V under the neck, a bi-line inserted into a V on a hip, a triple and a quadruple V on the side. It has also a little chevron on the shoulders. Discovered by Horedt, the altar is brown color and is wearing a human face. Therefore we have a compounded being composed of the body of a four legged animal and a human face. It is not very well done, not finished and the surface is not very polished, neither are the signs carefully made. In fact the artifacts and signs were made very rapidly, possibly during a ritual; therefore the action was more important than the aesthetic or the termination of the product.

⁴⁹ The inventory number is P112563. Maxim 1991: 177, Cat. 88.

It is apparent that the signs were incised with a broken stick or bone because of the remains within the channels. The Vs have a rounded silhouette. The scribe wanted to trace a V on the neck, then started to move his/her sharp tool in diagonal from the left but he/she changed mind and incised a new diagonal. Regarding the sign on the hip, he/she closed a V with two vertical strokes marking sign very close to a hand with three fingers. The tree-V is composed by a V above a close bi-V.



Figure 4.26: A zoomorphic altar incised with signs and with the right side broken.

The category of incised zoomorphic altars recovered at Tărtăria includes two other pieces. The first is the half front of a yellow-reddish and hard fired altar made of medium fine ceramic. Its style is in tune with the late Vinča culture (Turdaş group) and it bears a number of signs, among which is a plant motif on the throat.⁵⁰ The second one consists of two fragments of another altar bearing a meandric design.⁵¹

⁵⁰ It has inventory number IN13.990. It has been unearthed by Horedt in 1942, in the trench A, at a depth of 25-40 cm. The fragmented piece is 5.8 cm. high (from the upper part of the mouth), 6.8 cm large and 8.2 cm downwards.

⁵¹ It has been recovered by Horedt in 1943, in trench D at a depth of 2.00-2.20 m and has inventory number IN15.044.

Concluding the presentation of the objects found in the pit, we want to bring to light that it is very important to have a complete publication of them and of the pieces from the Tărtăria settlement because they are a key element in dating the magic-religious complex due to the problems in the stratigraphic data. Nevertheless many questions arise. The first regards the pile of objects. Why have all the artifacts been deliberately broken? Why was the head of the statuettes always saved? A ritual mask is worn by all the figurines, but why is it always asymmetric towards the left? Are there clues of black magic at Tărtăria deposition?

Other queries arise concerning the relationship between the tablets and the other cultic finds. Why are the tablets the only pieces deposited intact? These were affected by calcium but the other objects were not. Were the two piles of artifacts discovered separately by Vlassa? If this is the case the tablets cannot be dated by direct association with the Vinča statuettes.⁵² Nevertheless the best parallels indicate a similar date for the Tărtăria pit and its finds, and suggest their belonging to the central territory of the Danube civilization, i.e. the Vinča area, and their fitting to the early phase of the Vinča culture (Makkay 1974-5: 18; Lazarovici 1977; 1981; 1991: 93). However, we must also recognize the significant stylistic resemblance to other objects from the same cultural complex if we do not limit the comparison merely to a single or double feature.

Additionally, the features of the pit are not very clear. Why are both ritual objects and human bones present inside it? What was the identity of the buried person? Are we sure that we are dealing with a votive pit full of offerings? In conclusion, which kind of ritual happened at Tărtăria?

The crowd of the queries surrounding the Transylvanian site is directly connected to Vlassa's reticence. Why do his publications account for 32 finds from the pit, but he placed only 12 of them in the register of the museum's inventory and published information and photos about no more than 11 artifacts in connection with the magic-religious complex? And why did he include the pedestalled cup into the ritual pit, according to the inventory of the museum and his personal communication, but he decided to publish it separately and to set it apart in the showcase?

The next step of the present article will be the investigation into the fact that the Tărtăria tablets are dubiously dated archaeological artifacts.

4.5 Why the Tărtăria Tablets are Dubiously Dated Archaeological Artifacts

At the time of their discovery, the excavator evidently did not consider the pit to be important. Therefore, although Antiquity maintained that the Tărtăria finds were

52 This question was posed by Zanotti (Zanotti 1983: 87).

“carefully published” by him,⁵³ there are certain inadequacies in his account and the dates of these tablets as archaeological artifacts are not certain based on the following four points:

1. the rumors surrounding the circumstances of their discovery;
2. the gossip about their radiocarbon-dating;
3. the variance of the stratigraphy inside the pit;
4. the uncertain location of the pit inside the stratigraphy of Vlassa’s dig.

As with any evocative icon with uncertain origin, legends have proliferated around the discovery circumstances of the tablets precipitating a polarized point of view on the temperament and professionalism of the excavator. As some scholars point out, Vlassa was not present at the time of the historical discovery, which happened just some hours before the closing down of the excavation. The workers packed the last unearthed finds and he only recovered the important and unexpected pile of ritual objects afterwards in the laboratory of the museum. Many years later N. Vlassa described this to Gh. Lazarovici.

Other scholars believe that Vlassa was too professional to depart from his excavation on the last day of the project and so they propose another version of events. In August 1961 Vlassa and Paul were together excavating at Tărtăria-Groapa Luncii. During the digging Vlassa claimed to have urgent tasks at home and was then absent from the dig for a long time. Paul decided to not go on alone at digging Tărtăria and moved to another excavation at Planul de Jos. When Vlassa subsequently returned to Tărtăria he opened a new trench in another area of the settlement. A month after this, he presented the tablets as part of the stratigraphic sequence already sorted out for the archaeological site of Răhău.

Attila Laszlo who excavated at Tărtăria with Vlassa as student, does not remember when, where or how Vlassa recovered the tablets, but N. Vlassa told Gh. Lazarovici about his discovery and N. Vlassa and Attila László drew up the profile in section H. Based on this, a third wave of scholars maintain that Vlassa encountered the tablets while re-organizing the collections of artifacts that were found by Torma in Near East and were stored at Cluj museum. The proof of this assertion rests in a page they claim to be missing from Torma’s notebook: the folio with the drawings of the mythical tablets.

According to a fourth wave of scholars, the tablets could be a modern fake undertaken or created by Vlassa. In this last case, the argument implies that it was a path to success for a young archaeologist who felt trapped by impediments in his university career.

The only certainty surrounding the flourishing of these several legends is the hostile environment present within Romanian archaeology combined with the fact that Vlassa refused to discuss the essential issue of the circumstances surrounding

53 In the introductory note to Hood’ article (*Antiquity*, XLI, 1967: 99).

the finding of the tablets or their stratigraphic location. He also refused to carry on new excavations at Tărtăria-Groapa Luncii. However, our judgment should not be rash: his refusal to clarify the framework of discovery should not be taken as evidence for the accuracy of the worst of the rumors because this archaeological thriller might have another plot twist that offers more of a challenge to Vlassa's professionalism than to his ethics, as we can see in the next paragraph.

4.5.1 The Gossip about Radiocarbon Dating

Regarding the legends about the supposed dating of the tablets with radiocarbon, a direct analysis reveals that some little fragments have been taken away from their back. This is supported by the fact that even now there are still rumors circulating of a Russian analysis carried out on these tablets in the early sixties. Most scholars are cautious about the Russian rumors and never mention a direct ^{14}C analysis on the tablets. For example Marija Gimbutas states in *The Goddesses and Gods of Old Europe* that “By analogy (*italics are ours*) with calibrated radiocarbon dates for early Vinča layers at other sites (*italics are ours*), the date of the lowest occupation level cannot be later than the early fifth millennium” (Gimbutas 1982: 87). Other researchers (Bărbulescu 2001; Halloran 2002) are less prudent, claiming the results of a direct radioactive carbon dating of the tablets. Some novelists have even less caution and on the basis of the dreamed up ^{14}C analysis they claim that the tablets mention Enki and Ur of the Annunaki gods at least 1,000 years earlier than the correspondent Sumerian cuneiform texts (Gardner 2000).

The fact remains, however, that the tablets have never been analyzed by radiocarbon and according to various Romanian archaeologists they cannot be submitted to this analysis any more. After discovery, the tablets were soft and appeared covered with calcareous deposits due to the humidity in the pit. A well-meaning but hasty restorer (Josif Korody) confused a matter mixed with calcium-as in fact the tablets are (pulverized live calcium mixed with water in order to bind clay and sand)-with a calcium crust formed because of the moisture of the pit, and put them under hydrochloric acid treatment which removed not only the surface calcium as a slip but also destroyed their internal structure. In a late article Vlassa wrote that he noticed the emblematic signs only after the cleaning of the tablets. In order to harden them, he saturated them in a vacuum autoclave with extractable organic material, thereby submitting them to a baking process (Vlassa 1972: 371). Nobody knows at what temperature and for how long they had been baked. It is not possible that this was greater than 1500°C , because nitro/chemical liquid used for the saturation would blow up at any higher temperature. We will look at these important factors in a deeper way in §6 where we raise the question of whether the tablets may be a modern fake. For the moment we will limit our analysis to the fact that after the heat treatment, the pieces of Tărtăria would never be able to pass the carbon 14 test: the thermic stress

has rendered the clay's basic quality inadmissible for carbon analysis (Masson 1984: 115).

There are not any photos of the tablets before the chemical and thermic treatment and Vlassa did not explain the circumstances of the mishap either in the preliminary excavation report or in his subsequent articles. He refused to ever discuss this issue with his close colleagues and friends. In his publications he only noted that the tablets were "poorly burnt" (Vlassa 1963: 492). In fact the reddish color by which they are characterized might have been due to the accidental burning in the museum. Some scholars review the tablets as unbaked (Tringham 1971: 114; Whittle 1996: 101) and others as baked (Renfrew 1973: 67), but we do not understand on what data they base these opposite conclusions on an unknowable point.

This unfortunate accident and the reticence to discuss it hurt not only Vlassa's reputation, but also that of the tablets and of the Danube Script. Indeed some scholars have begun to claim that the inscribed objects were out of any chronology and context because they were found by Vlassa in the museum while putting in order the Zsófia Torma's collection or even that they are simply a modern fake.

4.5.2 The Vague Stratigraphy of the Tablets Inside the Pit

Even if the general stratigraphy of the excavation at Tărtăria-Groapa Luncii was reported with precision by Vlassa, the stratigraphy of the tablets inside the pit is unsure. The only little information available to us is from the preliminary excavation report (Vlassa 1962) and its English version that was published one year later on the magazine *Dacia* (Vlassa 1963). As some scholars have already observed, Vlassa's publications did not include any sectional drawing of the pit reproducing in situ the remarkable hoard of bones and artifacts or how they appeared at the moment of their discovery at the bottom of the pit (Whipp 1973: 148). His publications also lacked any data about the dimensions of the pit or other important information on it, or the circumstances of the dig, or the exact location of the findings (Masson 1984: 114). The only existing evidence is a dark and low quality, but unambiguous, photo in which an arrow points "to the 'ritual pit', dug in the yellow loess, where the idols and the clay tablets were found" (Vlassa 1963: 487 fig. 3, n. 4). In this photo one can also discern another important problematic element not mentioned by Vlassa: the funnel-shaped pit is not entire but guillotined by the excavators.

Unfortunately, at the moment of the discovery Vlassa did not consider the pit containing the tablets important enough to make an illustration of a cross section of it accompanied by a complete photographic record. It was only after having recognized that the tablets were inscribed by signs of writing that he spent more consideration on the hypothesized Mesopotamian influences in Transylvania; even then he was more interested in this than on the description of the excavation and its findings. At that time (1960) in Romania cross section excavation was not used in any archaeological

investigation, see for example Hăbășești monograph (Vl. Dumitrescu et alii 1954: pl. V, or for the others next 83 pits: 11-169) or that for Trușești (there are no drawings for the monumental altar or for the sanctuary made by the excavator of the complexes, and the later reconstructions have been made by Lazarovici M. 2002; 2004: 47-64, fig. 1, 3, 27).



Figure 4.27: The ritual pit on the north profile of G trench as projected in the photo profile of N. Vlassa.

4.5.3 The Uncertain Location of the Pit Inside the Stratigraphy of Vlassa's Dig

If the stratigraphic position of the tablet within the pit is not sure, neither is the stratigraphic position of the pit itself. According to the archaeologist in charge it was found in the yellowish clay of the first layer under the level Turdaș-Petrești (after Vlassa it is Vinča A3/B1)⁵⁴ but the difficulties with regards to the stratigraphic data are evidenced by J. Makkay' mistake when, putting together on a larger plan Vlassa's sections and those made by K. Horedt (fig. 3), has wrongly located the ritual pit near the south profile of the trench (Makkay 1990 fig. 1) (Fig. 4.28). Contrariwise the correct position of the ritual pit was reconstructed by Lazarovici in the northern border of this G trench profile (Lazarovici and Merlini 2004, fig. 3).

⁵⁴ See the stratigraphy of the showcase in Cluj museum: image 8.

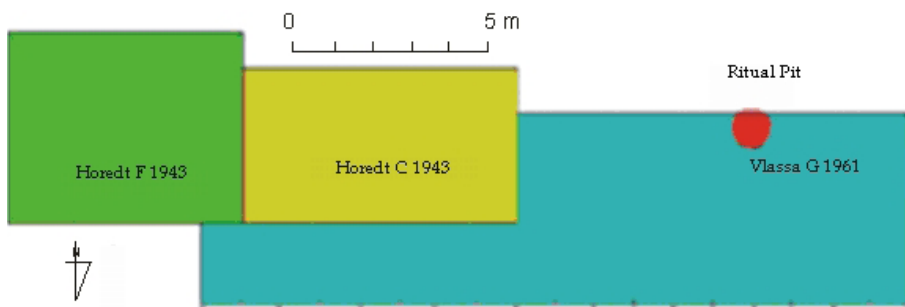


Figure 4.28: The place of the ritual pit after J. Makkay and others is wrongly located on the south profile.

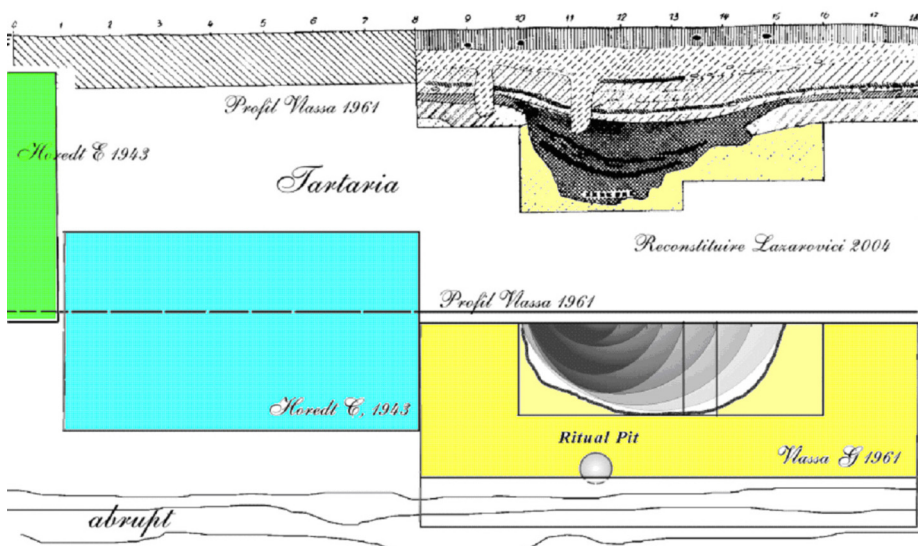


Figure 4.29: The Tărtăria stratigraphy with the location of the ritual pit. Profile of the trench G made by N. Vlassa and the different levels of excavation.

In conclusion, regarding the reasons why the Tărtăria tablets are dubiously dated archaeological artifacts, it is clear that the four weak points of Vlassa's framework (the rumors on the circumstances of the discovery and the recognition of the tablets,

the gossip on the presumed radiocarbon dating of them, their unsure stratigraphy inside the pit and the uncertain stratigraphic location of the pit itself) have induced many scholars to be skeptical about the information communicated by the Cluj archaeologist regarding the layer where the pit was located, the position of the tablets inside it and even their belonging to the Tărtăria settlement (See for example Berciu 1967; Dumitrescu 1969a: 92; Neustupný 1968a; 1968b: 35; Tringham 1971: 114; Whipp 1973: 148; Hood 1973: 148; Milisauskas 1978: 129-130; Comşa 1982: 82-85; 1987; Zanotti 1983).

4.6 The Transylvanian Tablets as the Focal Point of a Controversy on the Chronology of European Prehistory

In search for a “*deus ex machina*” to resolve the crucial issue of the chronology of European prehistory and its synchronization with other civilizations.

From the time of their recovery the inscribed Tărtăria tablets became the focal point in a fierce debate over: a) the origin and the chronology of writing; b) the chronology of European prehistory and its synchronization with other civilizations; c) the diffusionist paradigm according to which *Ex Oriente Lux*; d) the location of the cradle regions of civilization in Europe.

In fact, since their discovery the Transylvanian finds have occupied a unique and often contentious position in European prehistory because of the dispute over: a) the assertion that their symbols could express a form of writing; b) the dating of the European script and the inconsistency between the absolute and relative chronology because, according to the carbon 14 method, the Danube Script predated the earliest Sumerian cuneiform and Egyptian hieroglyphics for at least one millennium; c) the evidence of a local, linear evolution of Neo-Eneolithic cultures which reduces the importance of migration processes and diffusions; d) the possibility that the Neo-Eneolithic civilization of the Danube Valley would have to be placed in a leading position in European cultural affairs (Merlini 2003).⁵⁵

With regards to the dating of the tablets, the Tărtăria evidence paradoxically cracked the skepticism of some scholars with the spectacular claim that the Neo-Eneolithic Danube Civilization used an early form of writing yet at the same time this evidence served only to reinforce the skepticism of others. Vlassa explained that the tablets at Tărtăria came from the loess. However, to which cultural horizon does it belong? Due to the uncertain setting of the tablets inside the ritual pit and the uncertain location of the pit inside the stratigraphy of the excavated trench, scholars

⁵⁵ For a survey see Merlini 2004a: 51-63.

tried to date them on the basis of their similarity in typological features with other artifacts, the resemblance of their signs with the signs of the already known ancient literacy, and the correspondences between the objects recovered in the ritual pit with other known objects. The result was inconclusive because scholarship assigned to the layer where tablets have been found a very large range of options ranging from Middle Neolithic to Late Neolithic to Eneolithic up to Bronze Age. Listing them from the earliest to the latest cultural horizon:

- The early Vinča (Garašanin and Nestor 1969: 22);
- Vinča A (Vlassa 1976: 33);
- The high developed Vinča A (Milojčić 1965: 264, 268);
- Vinča A or Vinča B (Bognár-Kutzián 1971: 140);
- Vinča A3, A/B1 (Lazarovici Gh. 1977: 19-44; 1979: 123; 1989: 81, tab. 1)
- Phase A of Vinča-Turdaş culture (Masson 1984);
- Vinča A or Vinča B1 (Hood 1967: 110);
- The late period of Vinča-Turdaş B1-2 (Berciu 1967: 162 note 55);
- First half of Vinča B1 (Makkay 1968: 276);
- Vinča-Turdaş B1-2 (Makkay 1974/5: 27);
- Vinča B2 (Dimitrijević 1969: 94)
- Turdaş-Petreşti (Tringham 1971: 114)
- Baden-Coţofeni (Neustupný 1968b: 32; Dumitrescu 1969: 99-100 and 588-599; Zanotti 1983).

If the discordance in assigning a culture to the tablets and the ritual pit was extensive, no less divergent was the disagreement in giving a date to the elected culture. For example, the objects found together with the tablets have been easily related to early Vinča by numbers of experts and Milojčić stated that the slit eyes of the clay figurines⁵⁶ supported a date for the tablets in the Vinča A (Milojčić 1965: 264, 268). If radiocarbon dating evidence for Vinča period had been accepted then the tablets and their inscriptions should have been dated about 5000 BC (Neustupný 1968b: 32) or considered “genuine early Vinča artifacts of the fifth millennium BC” (Gimbutas 1982: 88 with a dating of 5300-5000 BC;) or of the latter half of the sixth millennium BC (Haarmann 1990: 76), one or two millennia before the dawning of the Sumerian civilization. But it was an unacceptable conclusion for many scholars who instead went in search of a much more traditional dating paradigm and who instead applied the archaeological connections known at that time (Uruk IV-Jemdet Nasr); these scholars settled the dates of the tablets from about 2900-2700 BC (Vlassa 1976: 33) to 2500 BC (Hood 1967: 110).

⁵⁶ Illustrated by Vlassa 1963: 489, fig. 6.

Consequently, the Transylvanian tablets have brought into sharper focus the discrepancy between dates based upon radiocarbon method and those based upon archaeological correlations (upgraded to “historical evidence”⁵⁷): the chronological gap is too large; the two options are totally irreconcilable. If the radiocarbon dating is accurate, the Tărtăria tablets cannot be squared with the Jemdet Nasr period even if one accepts a very early date for it: they must have been much earlier than Jemdet Nasr. However, if the Vinča culture is correlated with the Jemdet Nasr period, radiocarbon dating is not only useless but also misleading (Milojčić 1965: 268). These crossroads are best understood when they are framed within the period when the proponents of the new, radiocarbon chronology were on the offensive and the defender of the traditional, conventional chronology in a defensive position. Indeed the latter was open to direct criticism from radiocarbon regarding not only the Balkans and the supposed links with the Aegean Early Bronze Age on which Milojčić grounded his chronology, but also regarding other European areas. These difficulties “suggested that the traditional chronology might be seriously in error in the Balkans” (Renfrew 1973: 68) regarding the estimated dates, the durations of cultures, the idea that the historical process is based on sequential series of archaeological cultures, the diffusionist paradigm according to which the first farmers spread agriculture across the globe sowing also seeds for most of today’s languages and system of writing.

The pivotal role of the Tărtăria tablets in the controversy surrounding radiocarbon dating evidence transformed them in a sort of *deus ex machina* able to solve the crucial issue of the chronology of European prehistory and its synchronization with other civilizations. Nicolae Vlassa believed that the tablets offered him the possibility of establishing cultural and chronological synchronization between Europe and the Near East (Vlassa 1962; 1964; 1965 etc.). His opinion on this subject has been confirmed by distinguished scholars like Milojčić who constantly have claimed the invalidity of carbon 14 dates (Milojčić 1965) and Falkenstein (Falkenstein 1965). This view was also sustained by J. Makkay (Makkay 1967; 1969; 1971; 1984 and 1990), and Hood (Hood 1967: 99-102 and 1968) who considered the Tărtăria tablets as evidence of a short chronology drift from Orient for the Danube Neolithic. At the opposite pole, other archaeologists employed the tablets to champion the long chronology using radiocarbon dating for the Neolithic in South-eastern Europe. Within this irreconcilable controversy on dating there rests the entire relationship between the Balkans and the prehistoric Aegean and Near East.

The range of the published opinions about the dating of the tablets and the interpretation of the signs borne by them, as well as their origin, has been articulated with much more sophistication in several explanations based on five factors (for a survey of the different opinions see Merlini 2004a; 2004b):

57 Viz for example Neustupný 1968: 34.

1. The dating of the tablets to the Vinča-Turdaş phase or, to be correct, to the Vinča culture after new 14C dates⁵⁸ and archaeological evidence⁵⁹ that the appearance of Turdaş group is coeval to Vinča B2-Vinča C and its entire evolution is synchronic with Vinča C1-C2 (after Vl. Milojević's periodisation, Luca S. A. 2001: 96, 114, 118). Therefore the Turdaş group belongs to the Late Neolithic⁶⁰ (Lazarovici Gh. 1979: 71; 1979: 123; 1989: 81, tab. 1; Luca S. A. 2001: 139-143; Lazarovici M. 2005; Lazarovici, Merlini 2004; 2005; Lazarovici M. 2005);
2. The radiocarbon dates for the South-eastern Neolithic in Europe;
3. The idea that the Tărtăria tablets do or do not bear signs of writing;
4. The autochthonous or foreign nature of the Tărtăria signs, e.g. the supposed existence of similarities between the Transylvanian signs and the Turdaş and Vinča marks and/or the earliest Mesopotamian pictographic signs;
5. The native or overseas origin of the Tărtăria tablets.

In the next paragraphs we will resume and reorganize the controversy because it is still vital and it offers great comfort to the traditionalists some of whom are still considering the Tărtăria tablets the final proof of the fallacy of radiocarbon. Nevertheless, we would like to anticipate two of the conclusions.

First, after the Tărtăria storm the dominant chronological framework had its roots in traditional stratigraphic and comparative typological methods, whereas the study of absolute dates played a secondary role for a long time. Due to the supposed inaccuracy of these measurements, they have been used merely as illustrations supporting parallel tendencies in relative chronology. For almost two decades, this influential system limited the range of the Middle and Late Neolithic to the first half of the third millennium BC in the Carpathian Basin and the diffusionist paradigm was the rule and in general it was popularized as a "population wave of advance". In 1965 Vladimir Popović compared the Balkan finds, including some seals bearing signs, with those of the Early Bronze Age Aegean and the Orient, welding short chronology and diffusionist cases.

There is also a different opinion regarding the relative chronology, that synchronizes the first Vinča A1 discoveries with civilizations from the Near East and in particular with Halaf culture, evolved Hacilar culture, Can Hasan, etc. (Lazarovici Gh. 1979: 73-75, 131 and so forth).

58 According to S.A. Luca, the oldest Turdaş level at Orăştie is situated between 4768-4582 CAL BC (Luca S. A. 2001: 142). Lazarovici M. considers this data in a quite good relation with those obtained for Vinča C1-C3, C3-D1 or D sites in Serbia and coeval with those for Vinča C2-C3 from Vinča Belo Brdo established by W. Schier between 4980/4800-4600 BC (Schier 1996).

59 All sites belonging to this group contain Vinča C materials (Turdaş, Lumea Nouă etc.). See for example the reprint of Martin Roska's discoveries (Lazarovici Gh., Maxim Z. 1996: 223-267), or the publication of the archaeological materials from Turdaş or Orăştie (Luca S. A. 1997; 2001).

60 In this case the chronological sequence is Vinča A (A1, A2, A3, or A1, A2, A/B), Vinča B (B1, B2, B2/C) and Vinča-Turdaş (I, II) and not anymore Vinča-Turdaş A, or B as used in the even recent past.

Second, parallels drawn between Turdaş-Tărtăria and Jemdet Nasr served exclusively as chronological baseline (Vlassa 1963; Milošević 1965; Falkenstein 1965; Makkay 1969, 1974/75, 1990; Kalicz and Makkay 1977). Unfortunately, there was not, nor is there today, an objective judgment on the tablets and their signs that acknowledges the key role they have played in the international archaeological debate exclusively regarding the extent to which they become a battle field for another specific issue (i.e. the acceptability or not and the level of acceptability of radiocarbon chronology).

Scholars who ascribe the tablets to the Vinča-Turdaş or Vinča period but who deny the radiocarbon dates for the Neolithic in the South-eastern Europe

Several archaeologists unambiguously accept the excavation context and the dating of the tablets to the Vinča-Turdaş or Vinča period on the bases of the traditional relative chronology while simultaneously refuting as invalid the (corrected and uncorrected) radiocarbon dates for the Neolithic in the South-eastern Europe (Milošević 1965: 261-8; Hirsch 1968-1969: 203; Brentjes 1971: 23-4). In this instance the tablets could be ascribed to Turdaş-Vinča A (Milošević 1967) or Turdaş-Vinča B1 (Makkay 1968), i.e. Turdaş-Vinča I and II in a current and proper way, but in any case they are considered more or less contemporary with the earliest Mesopotamian written signs and they raise many questions. Do their signs bear essential connections with the pictographic writing of Jemdet Nasr period? Do they bear marks of a script or not? Were they indigenous or imported?

The discoverer of the tablets suspected immediately that the signs incised on rows on the tablets “may be taken for a rudimentary writing... at least the rudiments of an ideographic notation” (Vlassa 1963: 492). In his unpublished PhD thesis he specified that: “The absolute news relate with the tablets is the grouping of the signs that we have on two of the tablets that confer a rudimentary aspect of ‘writing’. It is also true that in the area of the Turdaş-Vinča culture we have hundreds of isolated signs or grouped (2-3 only), especially on the bottom of the pots or on idols” (Vlassa 1977: 13).

He was persuaded that, if the grouping of the signs represented a form of writing, then finding a Near Eastern origin would be beneficial since he believed that that area was the source of almost all cultural developments. He considered that the idea of prehistoric Europeans developing writing on their own and before their micro-Asiatic prototypes was too unlikely of a possibility to take seriously.⁶¹ Therefore, he tried to discern the direct or indirect influence of Mesopotamian “high culture” on the organized and well-developed grouping of signs on the Transylvanian tablets. He concluded that the signs on the archaic tablets of the record deposits of Uruk IV

61 Even if we will operate with the long historical chronology of the Ancient Orient, the postponement vis a vis of the 14C data of the Vinča-Turdaş is about a millennium. It is inadmissible to imagine that the pieces from Tărtăria (and many other Middle Neolithic Transylvanian objects that have an “oriental” nuance) are older than their micro-Asiatic prototypes; in the Orient, the historical chronology is supported by very solid arguments; the absolute data of this chronology coincide with those provided by 14C (Vlassa 1977: 14).

(3500-3200 BC) and Djemdet Nasr (3200-3000 BC) where writing was thought to have been invented, had the closest analogies to that one of the Tărtăria tablets. Many Transylvanian signs “are seen identical or very similar” to those of Uruk-Warka IV and some of them “look like those on the Djemdet Nasr tablets” (*italics is from us*). The hunting (?) scene “resembles that on an archaic cylinder at Ur” (Vlassa 1963: 492). Following this line of reasoning, he suggested that since the Mesopotamian tablets dated from that period, European ones would appear around 2900-2700 BC. Half of a millennium was considered a sufficient time lag for the Near Eastern innovation to have reached Transylvania: “the necessary time for the circulating of such pieces-or the cultural influence which gave them birth-down to the Mureș valley”. It was a date “admitted by most researchers for Vinča A” and according to Vlassa it “corresponds exactly to the date which as a matter of fact can put forward for the first layer at Tărtăria, even if the tablets were not extant” (Vlassa 1963: 494).

Then Vlassa, who was not a specialist in Near East history, noted that to push back “the date of Uruk-Warka IV and Djemdet Nasr... seems lately to be the general trend” and following this mainstreaming tendency he reached “for the end of the first layer at Tărtăria a date which would mark just the beginning of the Vinča B1 phase, as we already stated when we characterized the said layer (2600 BC)” (Vlassa 1963: 494).

It was natural that upon this unusual and astonishing novel discovery hitherto unexplained by local antecedents or parallels, Vlassa looked for an external influence, filiation or imitation. Of course, he also observed that many of the over three hundred signs on the sherds of Turdaș are identical to those on Tărtăria tablets. He did not concluded that it had a local origin nor that its temporal continuity with similar marks occurring in Neolithic sites of South-eastern Europe; what he did, however, was to introduce the question of whence the bearers of the Turdaș culture came with an implicit answer: the Near East (Vlassa 1963).

In the sixties and seventies Vlassa’s hypothesis was confirmed by distinguished scholars (Milojčić 1965, Popović 1965, Renfrew 1966, Hood 1967: 99102 and 1968; Makkay 1969, 1971, 1984 and 1990) because a number of experts on early systems of writing observed close or probable typological connections between Tărtăria signs (and the Turdaș group of signs) and the early pre-cuneiform Mesopotamian script, in the ‘proto-literate’ period of Sumer (Gelb 1967: 488; Grumach 1969: 258; Edzard 1969: 220; Hrouda 1971: 103). They enlisted: a) parallels in the shape of a number of signs; b) their incision on tablets; c) their incision on tablets similar to the Mesopotamian ones (Makkay 1973: 1-5). The best parallels were established by the very end of Uruk IIIb pictographic tablets (Makkay 1968: 276).

The Jemdet Nasr period (Uruk III-II) was at that time ascribed to be before or after 3000 BC by the relative chronology to the century (Porada 1965) and after 3000 BC by the 14C analysis (Moorey 1966). As observed above, to Vlassa and to many other scholars some centuries seemed to be a proper time-lag for the invention of writing-or at least for the captivating effect of its magic signs-to spread out from Near East to Transylvania, this led to him dating the tablets at about 2900-2700 BC (Vlassa 1976:

33). Makkay considered the tablet to be coeval “with pictographic or pottery signs”, ascribing them to the first quarter of the 3rd millennium (Makkay 1974/5: 27) and more precisely between 2900 and 2800 BC (Makkay 1973: 1). Some scholars considered the date for the beginning of the Vinča culture not earlier than 2500 BC (Hood 1967: 110) and according to this chronology the Tărtăria tablets have also been included within the cultural horizon of comparable tablets in Crete. They place them possibly before 2000 BC but more likely as late as 1750 BC while the idea of writing on clay tablets might have been introduced into Crete from Syria at the beginning of Early Minoan II (c. 2600 BC) or even before (Hood 1967: 110). Many statements agree with the very short chronology established by Hood but it was unfortunately based on a complete misunderstanding of the stratigraphy published by Vlassa. In fact he confused both the pit fillings with a hut infill and also the find spot of the tablets with a hearth (Whipp 1973: 148; Hood 1973: 148). Despite this, a number of researchers strictly maintain the conjectured existence of a correlation between the early pictographic Mesopotamian script of literacy and Transylvanian signs, arguing that if the Sumer tablets were not much earlier than 3000 BC the Transylvanian ones should be later, rejecting the “anomalies” of radiocarbon dating (although calibrated) from the Vinča culture based on “lurking imperfections in the method” and questioning whether Tărtăria marks may be considered signs of writing or if they are merely writing-like signs (Vlassa 1963: 485-494; Hood 1967: 99-113; Makkay 1968: 272; Makkay 1969: 9-27; Vlassa 1972: 372; Hood 1973: 149; Young 1973: 72-79; Vlassa 1976).

The leading position was established by A. Falkenstein, responsible for the publication of the tablets from Uruk, who pointed out a strict correlation with Uruk III B which belonged to the same cultural horizon as those of Jemdet Nasr. Falkenstein argued that the signs were definitely Sumerian and this line of reasoning was based on four factors:

1. The Tărtăria signs, especially those on the rounded tablet, are highly comparable with those on the early tablets from Uruk III and Jemdet Nasr as the scholar synthesized in a chart (Falkenstein 1965: 271); the Near East connections are particularly clear in the case of the symbolic hunting scene on the undrilled tablet that was a naturalistic representation and resembled well-documented Mesopotamian seals impressions;
2. Some signs appear to have been derived from Mesopotamian marks for numerals;
3. Both the Transylvanian and the early Mesopotamian tablets show no occurrences of the wedge-shaped instrument employed for cuneiform writing;
4. The shape of the rectangular tablets (relatively flat) and the system of dividing groups of signs by means of incised lines occurred also in Mesopotamia.

Establishing these connections, Falkenstein dated the Transylvanian signs around 2900-2700 BC and attempted to establish parallels between them and signs from the most ancient pre-cuneiform Sumerian documents found at Jemdet Nasr, Tell el-

Far'ah, and Uruk. Unfortunately he did not consider nor did he as attempt to address some important counterarguments about the same issues:

1. The Tărtăria designs show striking resemblances not only to the Pre-dynastic Mesopotamian writing but also to other scripts;
2. On the Uruk tablets the whole shape of the sign in the case of numerals is sunk in the clay with a round-ended stylus, while at Tărtăria the equivalent signs are incised in outline;
3. In Mesopotamia only some larger rectangular tablets are relatively flat and there are also very few small circular tablets to compare with the Transylvanian one;
4. In addition, the string-holes on two of the Tărtăria tablets have no parallels among the early tablets of Mesopotamia (Falkenstein 1965: 269-273).

It is significant to note that the tablets from Uruk III and Jemdet Nasr do not bear a merely primitive stage of writing; they display signs that are not only ideographic but also contain a phonetic element. In this occurrence signs stand for words and not for objects, animals or structures that they literally represent, and signs with recognized sound values are combined together to make words (Diringer 1962: 21). With this in mind, the main question regarding the marks on the Tărtăria tablets becomes whether they may represent a similarly advanced stage of writing or if they possess merely a superficial resemblance without any writing implications to early Mesopotamian tablets (Hood 1967: 104).

The group of scholars that drew attention to a strict correlation between the Tărtăria signs and the Mesopotamian signs considered the graphic influence in the framework of a more general cultural drift from the Near East that occurred at the turn of the fourth to the third millennium BC or during the 3rd millennium BC (depending on the author). Within South-eastern Europe the culture most markedly affected was considered that of the Vinča-Turdaş (Makkay 1973: 1). Müller-Karpe pointed out that human representation in relief was a common practice in Mesopotamia and that it occurred in South-eastern Europe only at Turdaş possibly because of Near Eastern influences (Müller-Karpe 1968: 307). Makkay investigated the advent of cylinder seals in Europe as result of a strong influence from the cylinder seals of the Jemdet Nasr and Predynastic periods. According to him the knowledge of making cylinders or cylinder seals in the Final Neolithic was possibly imported to the European continent by early settlements on the Cycladic Islands and via the export of obsidian from Melos to as far as Thessaly and Thrace. The small fragment of light-colored trachyte tuff with engraved signs found by Torma at the Transylvanian site of Nádorválya (Torma 1882: 44, pl. IV, 7; Vlassa 1970: 21, fig 19) might be the most distant example of a cylinder seal made locally under the indirect influences of the Mesopotamian ones (Makkay 1974/5: 26).⁶²

⁶² In opposition Renfrew considered the five cylinder seals found at Sitagroi as product of a local inspiration and made thousand years earlier than those of the Jemdet Nasr period (Renfrew 1972: 215).

Generally speaking, this group of researchers believes that idea of a local independent invention of a South-eastern European Neolithic system of writing is an absurd one because of the lack of complex phenomena and processes indispensable to the invention of writing listed, for example, by Gelb (Gelb 1967: 488): developed agriculture, full metallurgy, cities with large public buildings and monumental art (Makkay 1974/5: 23). Therefore they emphasize a Sumerian influence not only in the sphere of writing but also in economic affairs (i.e. the presumption of the exploitation of copper and gold deposits in Transylvania by Sumerian prospectors and the expertise on metallurgy). Taking into account the South-eastern European Neolithic phenomena in general under Anatolian and Near Eastern umbrella, they propound the influence of the earliest Sumerian writing system and they also maintain that Europe adopted latterly inventions of other important developments, e.g. the chariot, the pottery wheel (Makkay 1974/5: 23).

In conclusion, the viewpoint of an eastern-west drift of culture diffusion from 3100 and 2500 BC was based on four pillars: the identification of typological connections between the two systems of signs; the existence of a general cultural influence from the east; the difference in levels of economic, social and cultural development; the adoption by Europe of some inventions from the Near East at a later date. Following this line of reasoning the following questions arise: When and how were the inventory of signs of literacy, the system of writing and the technique to write on clay tablets transmitted? Was there some form of southern colonization of the Balkans during this remote period, or was the transmission done only by indirect methods? According to Hood, in Romania the first spread of writing or of signs derived from it may have been in a strictly religious or magical context. Accordingly, the author states that it is not impossible the missionaries of an earlier religion from the East to have brought a first knowledge of writing during the 3rd millennium BC (Hood 1967: 111). Although most of the scholars considered unlikely that the tablets were drafted by a Sumerian hand or in the Sumerian language of early Mesopotamia, dozens of amateurs offered their outlandish translations employing Sumerian sounds (Tonciulescu 1996: 9-15; Moisiu on line).

Most of the scholars who accepted the Vinča-Turdaş or Vinča horizon for Transylvanian tablets and were puzzled by the correspondences between the oldest European inscription and early Sumerian signs preferred to recognize the parallels only in shape but not in meaning between these tablets: the designs on the Tărtăria finds, especially on the rounded one, are quite similar to writing on early Mesopotamian tablets. So much so, that they must have been derived, even if indirectly, from it, but the original signs may have lost their original functions having been merely copied and used as symbols of a religious or magical character without possessing a deeper understanding what the Levantine signs actually meant (Gelb 1967: 488; Hood 1967: 111; Makkay 1968: 286-287; Makkay 1969: 9-27; Makkay 1974/5: 25).

The hypothesis that the Tărtăria tablets represent only a writing-like design was based on the argument that the signs of literacy did not occur together in the

same groups on these as they did on the Mesopotamian tablets. Two signs that occur separately but in adjacent groups on the Tărtăria discoid tablet are joined together on some of the Jemdet Nasr tablets to compose the name of a god: EN-GI. Nevertheless the presence of signs of literacy may reflect an awareness that these were marks of great power, combined with ignorance of the significance of writing (Hood 1967: 104-5; 1968). “The tablets, in all probability, are mere imitation of original Mesopotamian ones, made with a magic purpose without any real understanding, possibly by a person who saw the usage of such tablets somewhere, between Southern Mesopotamia and South-eastern Europe, without a real knowledge, however, of the art of writing... It is well-known that the apotropaic power is specially felt among illiterate people” (Makkay 1974/5: 24).

A rich imagination was necessary to make up for the incongruencies that arise from the discrepancies in dating, establishing chronological correspondences or justifying conjectures regarding the relationship between the Danube region and Mesopotamia or to explain signs that are considered graphic imitations with magic purpose and their deposition in a ritual pit. Hood applied Cirillus’ and Metodius’ mission of evangelization along the Danube to the Neolithic South-eastern Europe and Sumerian times. Indeed according to him, the Tărtăria tablets, found in a ritual context and resembling the early tablets of Crete and Mesopotamia, may harmonize with Vasić’s idea that the Vinča ruling class consisted of mining prospectors-cum-witch-doctors from the south engaged in the exploitation of the mineral resources of the Middle Danube region by exerting a hold over their native subjects through religion and magic (Vasić 1929). Popović undertook a complex exegesis of the epic of Gilgamesh in order to find traces of a Sumerian colonization of Transylvania and thereby provide a rationale for the ritual deposition at Tărtăria (Popović 1965). Gelb attributed the tablets to Sumerian traders familiar with writing, or to an unknown inhabitant of Transylvania who had a vague idea of Sumerian documents and mimicked them (Gelb 1967: 489). Merchant adventurers moving along the routes connecting the Middle and Lower Danube, the Cyclades, Anatolia and Mesopotamia may have provided the connection. Makkay assumed that the gold from Transylvania precipitated contacts between merchants from the Near East, Anatolia and Eastern Aegean and that European area and pointed out that the ancient gold producing site of Zalatna in György valley is near Turdaş and Tărtăria. He concluded that the mines in Anatolia could no longer satisfy the sudden increase in the demand for gold by the Mesopotamian city-states and that therefore the request was channeled-possibly via the entrepreneurial merchants of the Cycladic islands-to the efficient Transylvanian mines (Makkay 1974/5: 27).

If most of the detractors of the ¹⁴C dating method worked on comparative evidence assuming a connection between the Transylvanian signs and Mesopotamian signs, a minority supposed that the former had only vague parallels with the latter and that it was only a local development, independent from other near-eastern stimuli (Renfrew 1970: 51-52).

4.6.1 Scholars Acknowledging either the Vinča-Turdaş or Vinča Assumption of the Tablets and the Radiocarbon Dating for the South-Eastern European Neolithic

If the above mentioned perspectives were based on the negation of any reliability of ^{14}C for dating, at the opposite pole there are other scholars who acknowledged that both the Vinča-Turdaş and Vinča ascertainment of the tablets and the radiocarbon dating of Neo-Eneolithic cultures in South-eastern Europe were valid. In general they dated the inscribed tablets to c. 5300 BC, predating the early Mesopotamian pictographic written signs (Masson 1984). But do the Tărtăria tablets actually bear written signs? Are there connections between their signs and the later writing system of the Jemdet Nasr period? Have the Transylvanian artifacts been locally processed?

Concerning the first question, the acceptance by some experts of the radiocarbon dating precipitated the waning of their interest in the possibility that South-eastern Europe might have expressed a form of writing in Neo-Eneolithic times. The invention of *ars scribendi* was held so unthinkable that the simple possibility of it was ignored and its evidence given very little attention. From this perspective, if the European signs were really so ancient, they should be relegated to the sphere of decorations, ownership/manufacturer marks or simple scratches. According to Renfrew, it is “very possible that the signs on the tablets are a local invention... The similarities of some of the signs with those incised on the Vinča period pottery at Tordos, Banitsa and Vinča itself would suggest that they have to do with the Vinča culture or the Balkan Copper Age. (However) to call these Balkan signs ‘writing’ is perhaps to imply that they had an independent significance of their own, communicable to another person without oral contact... (Contrariwise they) seem to have functioned essentially within an oral tradition, as mnemonic aids to a chant which had to be learned by other means... And the marks on plaques or ‘tablets’, which can be plausibly associated with some ritual purpose, are likely to have had at most a mnemonic value, if indeed they were anything more than invocations, carrying a meaning only at the moment they were made... So that, while...these Balkan signs have an independent origin and held a real meaning for those who made them, to talk of writing, without careful qualifications, may not be appropriate” (Renfrew 1973: 67, 68, 176, 186).

Alternatively, other scholars considered the Tărtăria tablets as the earliest attestations of an old European script. A mainly religious tradition of literacy flourished in South-eastern Europe and covered a span of time from the late sixth to the mid-fourth millennia BC (Todorović 1971; Gimbutas 1972a: 113; 1972b: 47; 1973: 12; 1974; 1989, 1981; Masson 1984; Haarmann 2002). However, the question should be posed whether there is any resemblance or connection between the European system of writing and the Near East one.

According to most of these scholars the establishment of a new cultural chronology for South-eastern Europe (fairly accurately determined according to the dendrochronological method) has facilitated the re-evaluation of the relationship of *ars scribendi* between Europe and Mesopotamia in a direction that assumes the

exclusion of any influence from Sumerian culture. First, these scholars emphasize the two thousand year time gap between the earliest European inscriptions and the oldest Sumerian writings of the late fourth millennium BC. Second, they point out that any resemblance between the Transylvanian finds and those from the Near East was simply incidental (Berciu 1967: 162; Renfrew 1969: 28-29; Renfrew 1972: 7). Any stylistic connection with the earliest Mesopotamian signs of writing was considered to be merely occasional or illusory and they pointed to the difference in the incising techniques between Europe and Mesopotamia. With regards to the tablets from Tărtăria, Masson stated: “Leur aspect matériel ainsi que le caractère des gravures excluent la possibilité d’une importation proche orientale” (Masson 1984: 116, note 75). Third, they upheld the local origin of Transylvanian finds and marks. Fourth, they underlined the confirmation of an independent emergence of writing in Europe (that is, without Sumerian influences) by some orientalist (e.g. Helck 1979: 12).

It is important to remember that in Europe the first tablets appeared in the last phase of Stačevo-Criș culture, coeval with Vinča A, at Perieni, Glăvănești (Ursulescu 1998: 102-103, 271, 2; Lazarovici, Merlini 2004; 2005: 206, fig. 4).

Many of the scholars who are engaged in establishing a new calibrated chronology of South-eastern Europe consider that the origin of the tablets and their signs cannot be traced back directly to the earliest Mesopotamian pictographic literacy. They also do not explore any significant relationship between the two cultures resisting a line of thought that assumes that writing originated in South-Eastern Europe and spread towards Near East. Other experts, however, were puzzled by the similarities of the signs in the oldest inscriptions of Neo-Eneolithic Europe with early ‘proto-literate’ Sumerian signs and were inclined to associate it with a drift from the west to the east (Haarmann 2002). As a result, they questioned whether the ancient European tradition of writing may have provided impulses to the Mesopotamian tradition in its formative process (e.g. Rice 1994: 83).

4.6.2 Scholars Reconciling the Tablets with Radiocarbon Dates Maintain that they could have been Intrusive from the Upper Strata

Giving the Tărtăria tablets a significant boost to “some fanatics (*italics is our*)” according to whom “all the carbon 14 dates obtained from archaeological sites are invalid or too early”, another wave of scholars made an effort to move the polarized discussion away from accepting radiocarbon evidence or archaeological resemblances/correlations by attempting to demonstrate that the tablets had a problematic nature because they did not belong to the context with which they had been connected: the Vinča culture. The pit may have been disturbed and unsealed; it might not have been uncovered from the Vinča strata or the tablets may have intruded from the upper layers which occurred in the Tărtăria site (Turdaș-Petrești or Coțofeni).

Ruth Tringham and Sarunas Milisauskas (Milisauskas 1978: 129-130) have postulated that the pit may have been dug near the Turdaş layer, but not from it. According to them, it is possible that the tablets are from another cultural horizon and another location of the site: from “one of the later habitation levels ... from outside the area of the Turdaş settlement.” In support of this position, they argue that “signs similar to those on the tablets were incised on the bases of pots which have been excavated especially at the top of the Turdaş-Petreşti level at Tărtăria, and in Yugoslavia in Vinča-Pločnic assemblage, for example at Banjica and Vinča” (Tringham 1971: 114).

In 1967 V. Dumitrescu was the first to express doubts about the Vinča-Turdaş dating of the sacrificial pit and its contents; he believed that they belonged to a much later time, to the Coţofeni cultural horizon c. 2900-2500 BC as the anchor evidences (Dumitrescu 1969a: 92, 99-100, 588-589). On this basis he challenged the authenticity of the tablets and argued that if they were authentic the “cult” complex at Tărtăria should belong to the Coţofeni culture (Dumitrescu 1972: 93 fol.). However, after some time he abandoned the thesis that tablets were not authentic after he compared them again with the Coţofeni culture (Dumitrescu 1973: 469 fol.). M. Garašanin in *Praistorija* also judged Vlassa’s information on the discovery as “unchallengeable” (Garašanin 1973 I: 127) but he subsequently changed mind and considered the Transylvanian artifact to be more recent.

The Coţofeni-gate was re-launched the year after Dumitrescu by Neustupný and then by Roman (Roman 1969: 68). Neustupný asserted that all the layers contained a chronologically mixed complex and pointed out that the clay ‘idol-shaped pendant’⁶³ extracted from the layers in which the tablets were found resembled the “anchor ornament” common in the context of the Early Bronze Age of the Aegean area and also those from the Late Chalcolithic Coţofeni culture, more or less synchronous with Jemdet Nasr culture (Neustupný 1968a; 1968b: 35). In a published note on Antiquity, David Whipp revived the suggestion of a Bronze Age deposit pointing out certain deficiencies in Vlassa’s account of the discovery and suggesting, in agreement with the views of some scholars such as Neustupný (1968b: 32-35) and Berciu (1967), that the tablets came from a pit whose surface was not sealed by subsequent layers (Whipp 1973: 148-149).

Some scholars divorced the ritual pit from its archaeological context and made other interpretations that attempted to solve the inconsistency between absolute and relative chronology (i.e. the problem of the “anchor”, generally considered as belonging to the Coţofeni level). David G. Zanotti advanced the possibility that the tablets had intruded from the upper strata, most likely connected with the Bronze Age presence on the site, in particular with the Baden-Kostolac culture. This would date the tablets to be between 5,400 and 5,000 years ago, or contemporary with the Uruk

63 Illustrated by Vlassa 1963: 489 fig 6, n. 5, but unexplicably considered unpublished by Neustupný.

IV and Jemdet Nasr periods in Mesopotamia and would make their signs compatible with the Sumerian analogies detected by Adam Falkenstein in 1965 and Sinclair Hood in 1967 and 1968. In the Zanotti assumption, Vlassa found the inscribed artifacts in a pit dug from the Vinča-Turdaş level, but they had originally been buried in a very superficial stratum on the steep north-western slope of the mound characterized by a mixed archaeological context. The tablets could have intruded from that upper stratum and could have been a product of the trade or the reflux movement of tribes returning to the Aegean (Zanotti 1983: 212). This vision was challenged by Lazarovici, Maxim (1991).

In conclusion, there is a tendency to attribute the pit and its pile of object to later deposits that has overcome the disregard 14C method for dating and reconciled the tablet to it by disregarding Vlassa's account. It is worth noting that for a number of scholars the dating of the tablet to a late period was instrumental in their promotion of other Neolithic scripts to be designated as the oldest in Europe or even in the world (V. I. Georgiev 1969: 32-35; B. Nikolov and V. I. Georgiev 1970: 7-9; B. Nikolov and V. I. Georgiev 1971: 289). G. I. Georgiev and V. I. Georgiev for example argued the signs on the Karanovo seal, Gradešnica platter and other Bulgarian artifacts were the first written record in human history and maintained that the Tărtăria tablets were Coţofeni finds (G. I. Georgiev and V. I. Georgiev 1969).

4.6.3 Scholars Questioning the Authenticity of the Tablets

This afore-mentioned group of specialists challenged the authenticity of the Tărtăria tablets claiming that they were not discovered by Vlassa at the prehistoric settlement of Tărtăria but rather that he found them in the basement of Cluj museum, in one of the boxes in his custody that contained the Turdaş findings of Baroness Zsófia von Torma (Berciu 1967; Comşa 1982: 82-85; 1987 who disputed information and pictures published by Vlassa). According to other experts they were simply a modern fake.

After some years of heated discussion, the controversy over the tablets had not been solved, yet no consensus had been reached. Because of the lack of new information regarding the tablets and their signs, the conversation dwindled. The Tărtăria finds remained locked in a cellar of the National History Museum of Transylvania at Cluj and were regarded as a National treasure to be preserved from any further investigation. After 1961 a limited excavation took place at Tărtăria without any archaeological evidence giving new crucial information. Some Romanian scholars better assessed the available material and the stratigraphy (Lazarovici 1977b, 1981: tab. 1; Lazarovici 2003a; Lazarovici Gh., Maxim 1991), but their research that only partly narrowed down the range of archaeological probabilities has not been widely read. Some scholars observed that a 14C date derived from the bones in the ritual hoard would prove interesting (Whipp 1973: 148); regardless, nobody went in search

of them. The debate was extinguished because of the dearth of information and the impossibility of reconciling or going over such categorically expressed incompatible opinions.

4.7 Tărtăria Tablets as a Case of Serendipity

Sometimes events do not change the course of history by their direct and immediate impacts, but by their collateral effects. Although as one person wrote, the controversy on dating the Tărtăria tablets was only “straws in the wind” (Hood 1973: 149), in the last few years the possibility that they could be the “most ancient European library” has invigorated the re-examination of the archaeological material found in the Danube basin over the last century and a half. In a number of locations the checks currently in progress have allowed the re-evaluation of hundreds of inscribed artifacts that predate the earliest Sumerian cuneiform and Egyptian hieroglyphics. Therefore, in the last few years a rapid accumulation of archaeological evidence has occurred, supporting the thesis that a European literacy existed in Neo-Eneolithic times: the Danube Script.

Exciting discoveries are happening in museums and in archaeological collections of universities. Many signs and their combinations, unearthed during the last century’s excavations were not published by their discoverers because, without the pattern of decorations or symbols, they did not dare to speculate that these might express a system of writing.

Other archaeologists did not realize that their findings, catalogued and published even from decades ago, might bear inscriptions. They had considered that the strange geometrical, abstract and linear inscribed signs were merely poorly decorations scratched by confused artists. Therefore in reproducing and publishing them, they amended and adjusted them in a more fashionable way by regularizing their shapes or forcing the symmetry of their original patterns (for example, Roska 1941).

A third wave of scholars maintained that the strange signs were some sort of magic-religious symbols or ownership/manufacturer marks (for example Garašanin 1960-1961, 1973; Tringham, Kristić 1990: 609). If both interpretations failed, the default assumption was to consider them as simply random scribbles made by bored and idle potters.

Finally, some scholars did not even realize that the objects they had discovered bore signs. In the fifties Milutin Garašanin found an inscribed figurine at Supska (next to Cuprite, Republic of Serbia and Montenegro) but he did not notice the evident “A,” “I,” “M,” “H,” “Y” motifs positioned on a large triangle incised on the chest. This inscription was rediscovered in 2002 by Andrej Starović (2004).

The mere possibility that the Tărtăria tablets could express an early form of writing has served to change the point of view and the direction of the research of many scholars. Over the past last few years there has been a rapid accumulation of

archaeological evidence supporting the more general thesis that a European literacy existed in Neolithic times.

Even the direct conflict between radiocarbon and traditional stratigraphic and comparative typological methods is on its way towards reconciliation. The boundaries of this so-called short chronology came into question by the 1980s (Kalicz 1985; Raczky 1983) and an increasing number of radiocarbon dates have been published necessarily precipitating the revision of traditional or conventional 14C dates. The consequences of recalibration were twofold. On the one hand, absolute chronological dates became significantly older; on the other hand, the estimated duration of certain cultures lengthened drastically (Hertelendi E., Kalicz N., Raczky P, Horváth F., Veres M., Svingor É., Futó I. and Bartosiewicz L. 1995). As a result of these dramatic research findings there was the collapse of the traditional chronological system based on the traditional comparative method (Renfrew 1971, 1973). The Turdaş-Tărtăria complex, as well as their tablets, on the one hand were moved from to the turn of the 6th and 5th millennia yet on the other hand lost their value as general chronological indicators of the Neolithic of southeastern Europe, especially in the Carpathian Basin (Renfrew 1966; Neustupný 1968b; Zanotti 1983; Kalicz 1985).

Additionally, the idea that writing was spread by the plough of the first farmers from Near East to the Balkans was increasing unconvincing based on archaeological as well as chronological grounds. Closer examinations of the signs revealed that the idea of their transmission from Orient was not well-documented and the light by which the Middle Danube's past has been illuminated became faint.

For these reasons, we have currently a new reasonable social framework for the Transylvanian finds and they are no longer a unique wonder. But their time-frame has been adjusted to being the turn of the 6th and 5th millennia without inspecting them as some years ago it was forced to the turn of the 4th and 3rd millennia. At any rate their context will decide the features and destiny of the tablets and their signs. But which is the actual date of these artifacts? Are we sure that they belong to the sixth millennia BC and not to the fourth? Are we confident that they are made of local material and that they bear local signs? Is there a possibility that they are a modern fake? The basic evidence for our reconstruction must come from the remains themselves and not from a more or less plausible and coherent framework.

4.8 Are the Famous Tărtăria Tablets Infamous?

According to some scholars the tablets could be a modern imitation. It is easy, although not simple enough, to answer that a direct analysis of fake pieces made in Transylvania are straightforward to recognize because they are roughly made.

Other scholars judge the inscriptions just a Vlassa's "game". And there are those who suggest, in no uncertain terms, that he was a counterfeiter. According to this

point of view, as the archaeologist Vlassa had the skills to perform a perfect forgery and we should discuss not the “famous Tărtăria tablets” but the “in-famous one”. Regarding this point it is significant, but not conclusive, to collect the testimony of Vlassa’s colleagues who maintain that he only began to study the topic of the tablets not before but after the Tărtăria discovery.

According to a third wave of scholars the tablets are not from Tărtăria: they could come from another Transylvanian site, another region of Danube civilization, or even much farther, e.g. from Near East.

The tablets could belong to another Transylvanian settlement and have been erroneously attributed to Tărtăria. In *Istorie Veche V. Dumitrescu* underlined some likenesses between the circular tablet and pieces from von Torma’s collection, observed that this assembly has been spilt up in various museums of the region, and challenged as superficial and not very likely Vlassa’s interpretations regarding the tablets and the objects of von Torma’s collection, as well as the direct analogies he established between Transylvania and Mesopotamia (Dumitrescu 1972: 93 foll.).

Other scholars have expressed their persuasion that the tablets come from another site of the Danube region. For example, in *Studijne Zvesti V. Dumitrescu* ascertained them to be in the Cucuteni style and technique (Dumitrescu 1969: 92). According to the last grouping of scholars, the Tărtăria tablets could have arrived from Near East.

If the aspect of the objects as well as the style and technique of the incisions excludes the possibility that the tablets were imported from the Near East, what about the other two hypothesis regarding their foreign origin? Can we determine the origin of their matter?

In order to establish some firm points, the Prehistory Knowledge Project asked Lucreția Ghergari and Corina Ionescu to study the tablets under the microscope at the Faculty of Geology, Geological Department of Cluj University. On this occasion it was observed that the pieces showed a “chestnut reddish color” as stated by Vlassa (Vlassa 1963: 492) and that they are crystallized, to the point of looking like tuff. Vlassa also observed that the tablets were “poorly burnt” and advanced the possibility of a secondary burning. He mused whether this could have occurred “In the museum vacuum autoclave”.

Vlassa asked E. Stoicovici (Babeș-Bolyai University, Cluj) to perform a chemical and mineralogical analysis of the tablets and idols from the cult pit. The main result was that all of them have the same chemical-mineralogical composition (Vlassa 1977: 14). Our analysis confirms that all the tablets have the same type of material which contains a very small quantity of clay and a lot of sand. The manufacture of the tablets from local material proves they were not imported.⁶⁴ At the farthest, they could have come from other areas of the same region. According to our geological analysis the

64 This observation is consistent with Winn 1981: 186.

sand has crystals of quartz typical of the mountain 20-25 km west from Tărtăria and very well known in Neolithic times for its gold mines. The sand of the tablet bearing the hunting scene is less fine than that of the other two.

According to the analysis of the mixture and paste, the tablets cannot be analyzed by the ^{14}C method not only due to thermic stress, but above all because they are made mainly of sandy clay. They contain too little carbon; therefore it is impossible to determine their isotopic chronology.

On the surface of the pieces there seems to be a high concentration of calcium carbonate. Only a grass fiber was discovered and it is located on the superior part of one tablet (Fig. 4.30). This fiber was covered with a clay stratum and with a carbonate scab. However the original slip has been modified by the untoward baking and, consistent with the microscope analysis, by an acid bath the tablets suffered at Cluj museum just after their discovery. As we have anticipated in §3C, the tablets had in fact been left for a while in a hydrochloric acid bath in order for the calcareous deposit to be cleaned from its surfaces.



Figure 4.30: Organic mixture from modeling, final stage.



Figure 4.31: Detail of the round tablet with some calcareous areas destroyed by acid treatment.

The chemical process, however, did not affect only the surface. Because the mixture of the material contained a lot of calcium carbonates, many cracks appeared during the process of cleaning. Because the artifacts are mainly made of limestone, although the treatment with hydrochloric acid was intended to clean only their surface it affected deeply the calcareous inclusions and the binding of the material. In fact Vlassa thought that the abundant calcium was due to the humidity in the pit and did not consider the possibility that the tablets were made of some sort of “Neolithic cocci pesto” very famous in Roman times (a mixture of lime, sand and pieces of brick or potsherds, used for pavements and the plaster of walls).

After the pieces were cleaned by the restorer in the hydrochloric acid bath and many small cracks appeared, the pieces had to be conserved. For this purpose they were covered with a special fluid (nitro-varnish and diluents) and placed in a drying chamber at a low temperature for the deep penetration of the same fluid. This treatment affected all the three pieces. The tablet bearing the hunting scene was cleaned more intensely than the other two.

Now we have all the elements necessary to answer to the question why the tablets were affected by calcium and the other objects were not: it was not because they were recovered separately by Vlassa, but because the tablets had calcium inside of them and it ended upon their surface. If the chemical action cleaned the surface of the artifacts, at the price of ruining their internal structure, the calcium still exists and in a number of years the Transylvanian tablets will again be covered by a white

substance. The process is made clear by comparing the photos taken by Lazarovici in 2000 and the photos by Merlini in 2006.

To reanalyze the tablets a thin section analysis of them would be necessary, but it will be very difficult because the pieces belong to the “treasure” category of Romanian cultural heritage and this category has special rules for its preservation and investigation.

4.9 The Radiocarbon Dating of the Human Bones Found with the Tablets

For 42 years nobody considered that the tablets were accompanied by human remains which are still preserved in Cluj, in the basement of the National History Museum of Transylvania. Under the patronage of the Prehistory Knowledge Project, in October 2003, we went in search of the bones and found them. We requested an anthropometric analysis of them from the University of Iași and sent a sample of them to Rome to the Laboratory of the Department “Scienze della Terra” of La Sapienza University for a ^{14}C analysis.



Figure 4.32: The tablets were accompanied by human remains which are still preserved in Cluj, in the basement of the National History Museum of Transylvania.

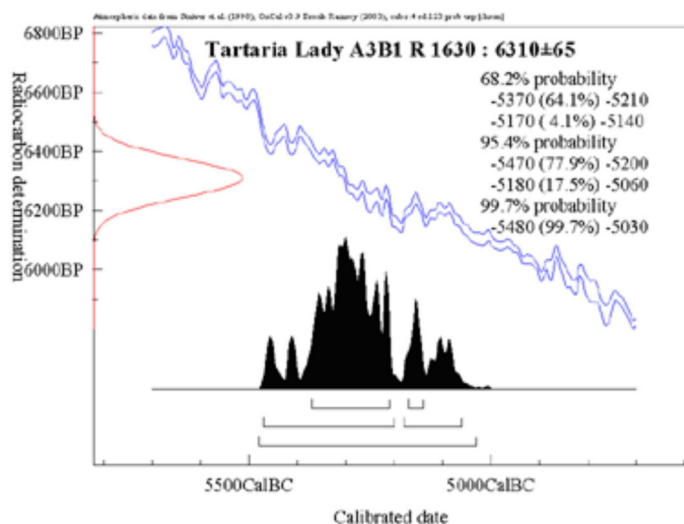


Figure 4.33: Diagram of data obtained from the human bones belonging to the ritual pit.

The uncalibrated age of the ^{14}C analysis of the bones made by the Laboratory of the Department “Scienze della Terra” of La Sapienza University has been converted to the corresponding calibrated age using the data and the procedures reported in Stuiver Minze and Reimer Paula J. (Stuiver and Reimer 1993). The results are: Rome-1631 (human bones): 6310 \pm 65 yr BP (calibrated 5370-5140 BC) (Merlini 2004a: 289; Merlini on line). Therefore, the earliest attestation to a European script comes from Transylvania.

If one compares the chronostratigraphic sequence of Transylvania and Banat sites with the ^{14}C age of the human bones discovered by Vlăssă in the ritual pit, the Tărtăria complex may be placed into the early Vinča period (Lazarovici Gh., Merlini 2004). The bones may belong to Starčevo-Criș IVA discoveries (contemporary with Vinča A2), as those from Cârcea, Banat culture I (Mantu 1998a; 1998b; 2000; 2002) or to early Vinča as those from Liubcova, Orăștie, Turdaș I and Uivar (Mantu 1995; 1998a; 1998b; 2000; Laszlo 1997; Schier and Drașovean 2004).

Vlăssă connected the ritual pit containing the tablets with a pit house he found nearby (Vlăssă 1962; 1964 fig. 8, 11). Indeed if one examines the excavation levels it is apparent that: a) the pit house goes from the 10th/11th level of excavation to the 16th/17th, while the ritual pit could have been positioned between the base of layer 11 and layer 14 (fig. 17); b) the distance between the two structures is only 70-90 cm; and c) they belong to the same archaeological complex. We verified the close relationship between the ritual pit and the pit house by comparing the radiocarbon data of the human bones from the former and the animal bones from the latter. As mentioned

above, the radiocarbon date for the human skeleton is level h11, Rome-1631 = 6.310 ± 65 yr BP (1σ , 5.370-5.140 Cal BC). The radiocarbon date for the animal bones found at the bottom of the pit house is level h16+h17, Rome-1655 = 6215 ± 65 yr BP (1σ , 5.280-5.060 Cal BC) and the radiocarbon date for a mixed cultural level from the cleaning of the profile and by the excavation made by Horedt, Rome-1630 = 6200 ± 65 BP (1σ , 5.260-5.050 Cal BC). Radiocarbon data sustains that the ritual pit and the pit house are coeval. (Fig. 4.35: Dating bones found at the pit house base).

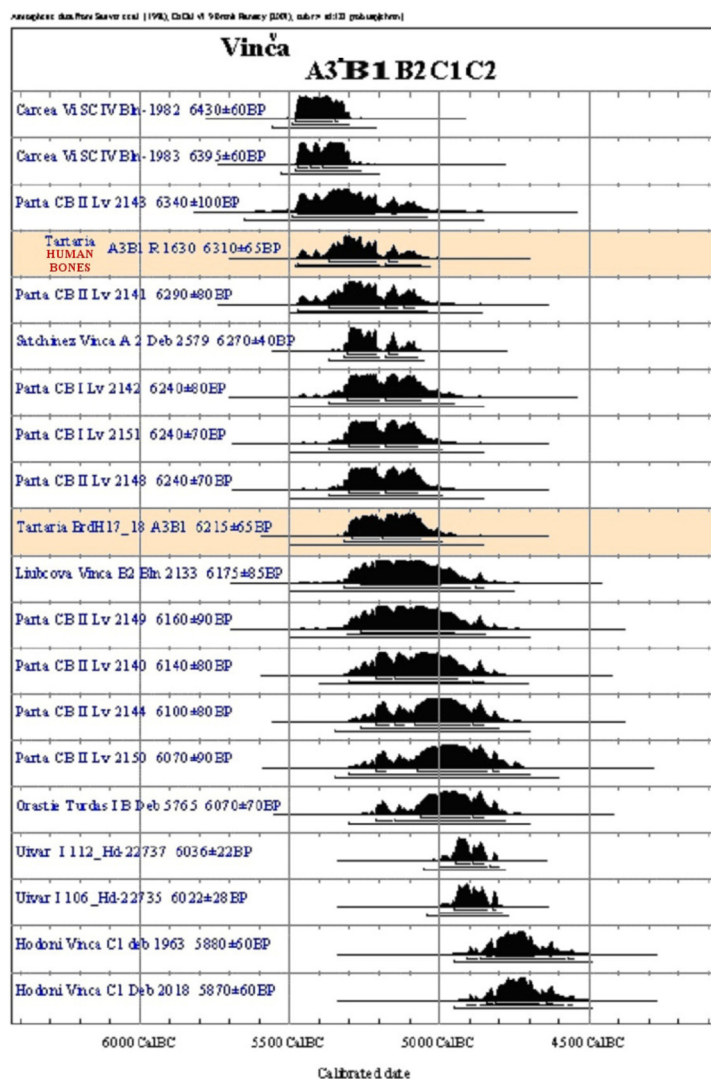


Figure 4.34: Absolute Chronology of Early Vinča.

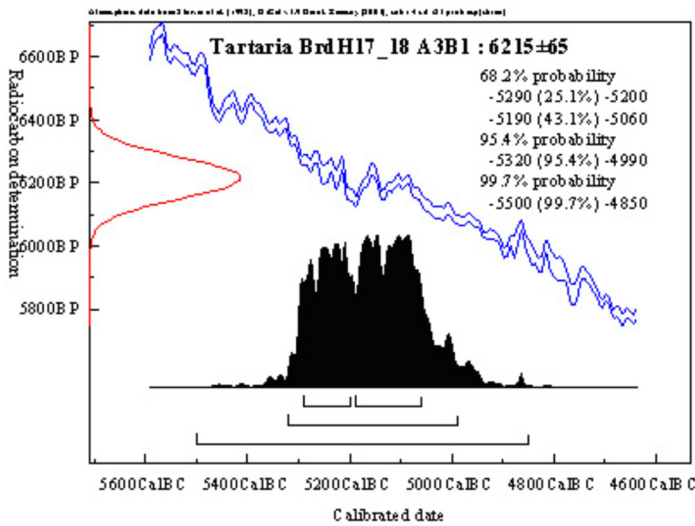


Figure 4.35: Diagram of data obtained from the animal bones found at the base of the pit house.

As noted above, some scholars, perhaps in an effort to explain the incongruity of the signs on the tablets with their expectations, have insinuated that the tablets had intruded into the Vinča layer from later and higher levels. Challenging their assumptions, can we assert that bones and tablets are synchronous?

First, let me point out again that these scholars are following an obsolete chronology. They do not realize that the Turdaș culture they refer to was born at the beginning of the 5th millennium BC on a Vinča B grounding and developed after the Vinča C migrations with the concomitant social shock and cultural collision. On the basis of the new excavations carried out at Turdaș and Orăștie one has to consider this cultural group more recent than the Tărtăria human being and that it belongs to the Late Neolithic concurrent with Tisza, Stoicani-Aldeni and Pre-Cucuteni cultures.⁶⁵

Second, even if the present-day position of the pit on the sloping edge of the mound could mean that some of its upper portion had eroded over time, the key point is the establishment of the epoch when this might have happened. Let me consider how the tablets' intrusion occurred in the Zanotti's reconstruction. In hope of ascertaining the true location of the Tărtăria tablets, he attempted to recreate via computer the area of trench G (where the tablets were found) as it was prior to the 1961 dig. Using

⁶⁵ Radiocarbon data for Turdaș culture are: Turdaș, pit house 1/1993: Deb-5775 5790±70 BP, (4734-4549 CAL B.C.), pit house B2/1994: Deb-5765±70 BP (5044-4895 CAL B.C.); Orăștie-Dealul Pemilor, pit house 1/1992-1993: Deb-5762 = 5825 ±60 BP, (4768-4582 CAL B.C.) and pit house 2/1994: Deb-5775 = 5790±55 BP (4734-4582 Cal B.C.). See Luca, 2001: 140-142, pl. VI-IX.

a combination of map enlargements, sections and Vlassa's original photographs, he hypothesized the proximity of the ritual pit to the original surface prior the excavation. But in his artificial and untested study he did not take into account that the river once ran underneath the settlement and had eroded a side of it. The very steep bank still proves this and the line of the ancient course can be traced beneath. This natural phenomenon gave the slope a different inclination from that presumed by Zanotti. His reconstruction of the sediments is only valid prior to, but not following the Vlassa excavation; surely it looked different four thousand years ago, by the time of Baden-Kostolac culture.

Gheorghe Lazarovici and Zoia Maxim did a topographic survey on this controversial point and concluded that if the high terrace of Mureș river shows presently a very abrupt bank eroded by the flood in the area of the trenches made by Kurt Horedt, Nicolae Vlassa and Iuliu Paulthat cover an area of about 200 m, in Neolithic times the settlement did not have an eroded tell shape but it lay on a terrace whose limit was at a distance of a minimum of 10-15 meters from it. Lazarovici and Maxim' reconstruction is in sync with Makkay's: "It should be mentioned that on the photographs of the two profile walls of area G no such a sudden slope of at least 2 m is visible; on the contrary it can be postulated that both the levels and the surface were horizontal" (Makkay 1974/5: 14). (Fig. 4.36) The conclusion is that the feature of the pit and the tablets' position were not disturbed by the Baden-Kostolac pit (30-40 cm) which was supposed by Zanotti to have cut as deep as 2 meters. The leakage angle of the reconstructed slope by Zanotti measures around 45° but in reality it is 70-80°; a fact which indicates that the erosion was natural and intense, demonstrated in image 38 where "Vlassa G" indicates the trench in which the ritual complex was found (Lazarovici Gh. and Maxim 1991: 22). (Fig. 4.37) Based on this evidence Lazarovici and Maxim criticized the Zanotti doubts in harsh terms, considering them "unreasonable or naive" and state that his remarks were "childish and untrue". And Milisauskas's latest work (Milisauskas 2002) carefully avoids taking part in the controversy.

Makkay challenges the hypothesis of the destruction of the upper portion of the ritual pit by either human disturbance or digging or by natural erosion. Regarding to the first point, he explains that there are no traces of damage of the pit and that even if it could have occurred only contemporaneously or immediately after the deposition of the tablets: "The original 'mouth' of the pit thus could have been disturbed only by a digging contemporary with the lower (Tordos) level or originating from the time immediately after it (i.e. before the Tordos-Petrești level). There is no trace however of that, nor is it mentioned by the excavator, and if there were, it would confirm the dating of the pit to a period earlier than the Tordos-Petrești level". The same conclusion is also valid if the destruction of the mound of the pit would be the consequence of natural erosion. "In the case of a horizontal leveling (i.e. in Tărtăria), erosion may only destroy the current uppermost layer, i.e. before later (e.g. Petrești or Coțofeni) layers are deposited on it" (Makkay 1974/5: 14).



Figure 4.36: The river once ran underneath the settlement and had eroded a side of it. The very steep bank still proves this and the line of the ancient course can be traced beneath.



Figure 4.37: Location of the excavations made by Horedt, Vlassa and I. Paul on the slope.

One should also consider that the ritual pit is too narrow and its funnel shape would not allow for the fall of a hoard composed by the tablets and the associated 29 artifacts. As Vlassa stated in his unpublished PhD dissertation, the diameter (of the pit), 40 cm, showed it was impossible to believe that the pit belonged to the Coțofeni culture, which was ca. 4 m up in the cultural strata (Vlassa 1977: 13).

Vlassa also reminded us that there is no known Coțofeni site that contains Turdaș type idols, alabaster Cycladic idols, or signs of Turdaș type on its sherds (Vlassa 1977: 14). A key argument for the changing of the dating that challenged Vlassa's stratigraphic position of the complex was the presumed Early Bronze Age of the "anchor", but unfortunately Neustupný did not cite any parallels to back his claim (Neustupný 1968a; 1968b). In fact, Vlassa pointed out that this piece is similar to the "anchor" pieces from the archaic period (beginning of the "azzura") at Poliochni and in the surroundings it has many similarities to the Vinča ones (Vlassa 1972: 368, n. 5; 1977: 14). Makkay (1974/5: 16) and Lazarovici Gh. and Maxim (1991) documented that this object had little to do with the "anchors" or hooks (viz Elster 2003) of the early Aegean Bronze Age or Coțofeni period and several similar artifacts have been found in the Neo-Eneolithic of South-eastern Europe.

Last but not least, we examined two photos made by Vlassa (south profile of G trench with the pit house and north profile of G trench with the ritual complex) and one can see the dark, thick and undisturbed layer 0.5 m above the mouth of the pit but at least 1 m under the Coțofeni level (fig. 26 and fig. 18, recovering Vlassa 1963 fig. 3, 4). Comparing these photos by following the same line of the profile one can check, although with some difficulty, that the pit was dug from the lower layer into the virgin soil as stated by excavator who maintained in his PhD dissertation that "The deepness of the pit...show[s] that is impossible to believe that it could belong to the Coțofeni culture, that was ca. 4 m up. We also remember that the Turdaș level of our excavation was covered by a fired adobe platform belonging to a surface dwelling from the level II (Turdaș-Petrești) and on top of it was another similar platform from the level III (Petrești-Turdaș)" (Vlassa 1977: 13). (Fig. 4.38)

We think that a part of the pit (cca. 1/3, 1/4) was destroyed during K. Horedt or N. Vlassa excavations. This may be observed in one of the Vlassa's photos, that offers information regarding the depth and the size of the destroyed pit. Because of this, some pieces and bones may be absent.

Now we can answer to the question regarding the localization of the cultic pit and the pit house because we are able to infer its position from the perspective of Vlassa's two photos we have above mentioned and published. (Fig. 4.39: Vlassa photo 3; Fig. 4.40: Vlassa photo 4; Fig. 4.41: Localization cultic pit and pit house). We are also able to understand why the archaeologist in charge did not put the ritual grave inside the stratigraphy of the excavation made at Tărtăria: firstly, the drawing was made the day before the end of the digging; at a distance of around 150 cm from the place the pit was discovered next (last) day of the excavation. Secondly, he underestimated the importance of the discovery before the recognition of the incised signs in the laboratory.



Figure 4.38: The pit house. South profile of G cassette made by N. Vlassa (photo by N. Vlassa).

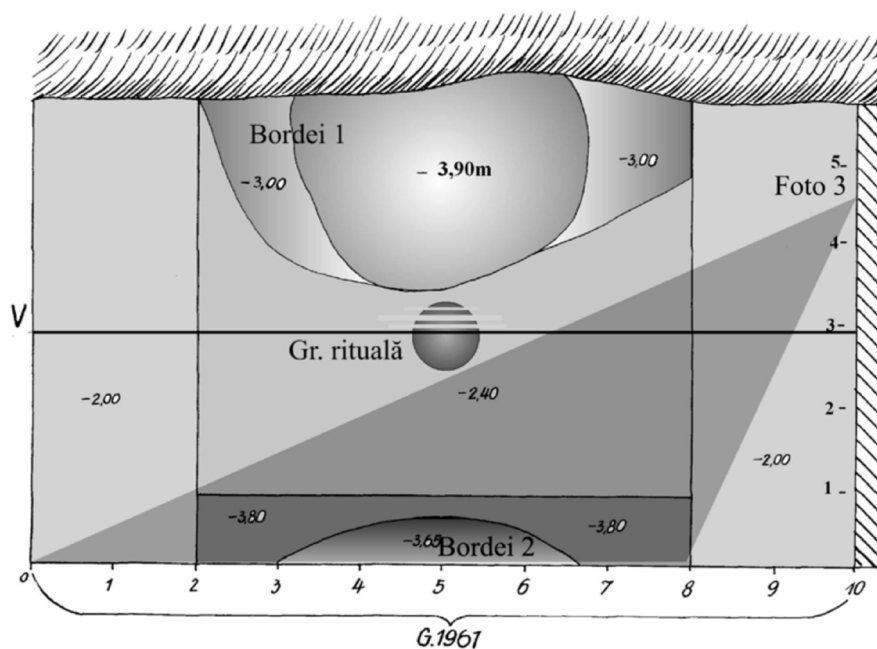


Figure 4.39: The perspective of Vlassa's photo n. 3 in Vlassa 1963: 487, Figure 3.

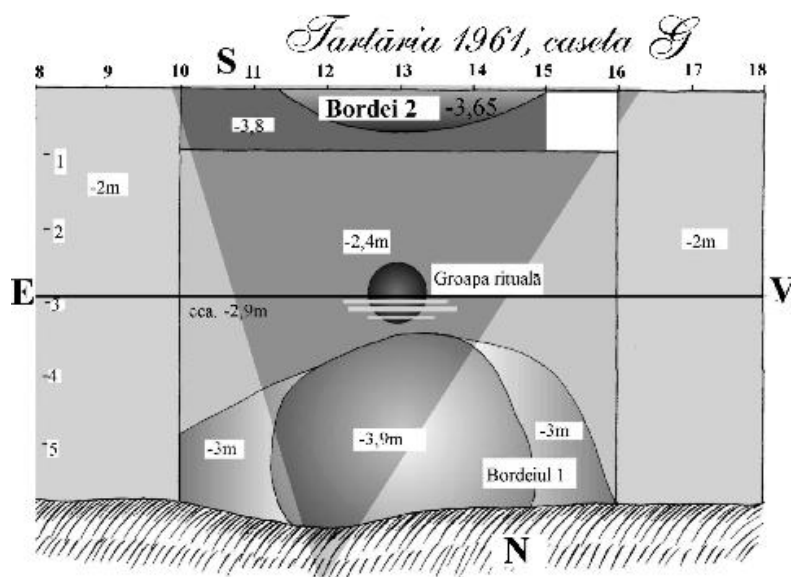


Figure 4.40: The perspective of Vlassa's photo n. 4 in Vlassa 1963: 487, Figure 3.

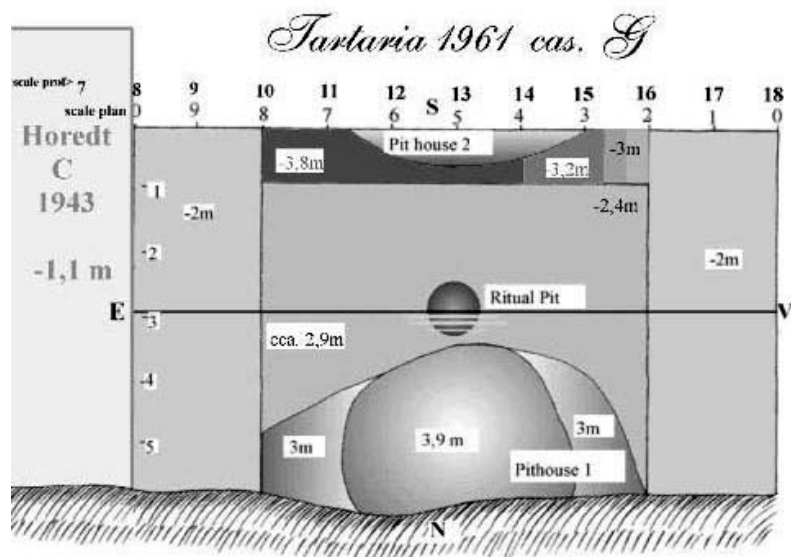


Figure 4.41: The localization of the cultic pit and the pit house.

In conclusion on this point, synthesizing N. Vlassa's information we are able to reconstruct the profile of the excavation layers from trench G.

- The deepest layer, thin and interrupted, belongs to Starčevo-Criș culture (IIA phase) documented by few remaining potsherds.⁶⁶
- The layer IIa from bottom to top has pottery from Vinča A3-B1, (Lazarovici Gh. 1977: 19-44; 1981: 169-196; 1991), Petrești AB (Vlassa 1976, Paul 1981; 1992), "Alföld Linear" (Makkay 1974/5: 14) or Pre-Cucuteni (after Lazarovici Gh.), Cluj-Cheile Turzi-Lumea Nouă (CCTLNI) cultural complex (Lazarovici. Maxim, 1991: 24).
- The layer IIb is connected to the cultural complex Cluj-Cheile Turzi-Lumea Nouă through the painted ceramics with white background and red or brown decorations (Lazarovici. Maxim, 1991: 24)
- The layer III contains mainly Petrești painted pottery.
- The upper stratum was ascertained to be from the first phase of Coțofeni culture related to the Baden and other cultures, probably Indo-European populations which replaced the Neolithic and Eneolithic inhabitants throughout South-eastern Europe.

Here is the stratigraphy after our revision (Lazarovici Gh., Merlini 2005-2006):

H11? excavation level Starčevo-Criș II and Vinča A3; level of the ritual pit

H10? excavation level Vinča A3 + materials from pit house (nr. 2.3) maybe the pit house 1.

H9? excavation level Vinča A3/B1 + materials from pit house (nr. 2.3)

H8? Horizon from excavation of pit house nr. 2 and + materials from pit house (nr. 2)

?H12-H13 excavation level, pit house 2.3 + 2.2, Vinča A3/B1

?H14-H15 excavation level, pit house 2.2, Vinča A3/B1

?H16-17 excavation level, pit house 2.1 Level with C14 data (Rome 1655, 6210 ± 65), Vinča A3/B1

H7? excavation level Vinča B1 + materials from Vinča A3

H6? excavation level Vinča B1 and CCTLNI-Lumea Nouă group

H5? excavation level Vinča B2 and CCTLNI-Lumea Nouă group mix with Petrești AB.

⁶⁶ Remains of this culture are pointed out by the presence of hashed chaff used as a cleanser (Luca 2003: .24).

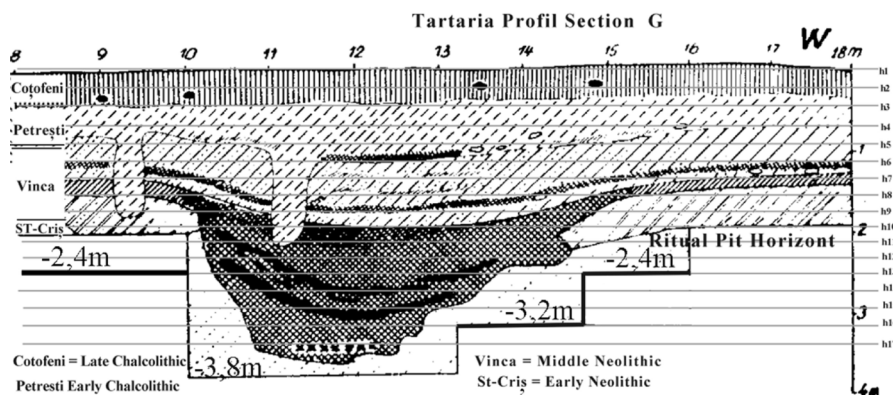


Figure 4.42: Our reconstruction profile with excavation layers of trench G based on information from N. Vlassa.

4.10 The Enigma of the Charred Human Being, the Cultic Sacrifice and the Cannibalistic Ritual

As we have already mentioned, in Vlassa's excavation report the pit was filled with earth and ash and the bones laid at the bottom appeared "scorched and disjointed, some of them broken" and they were supposed to be associated with the three clay tablets covered with strange signs and a small pile of offerings. These three key observations directed him to interpret the pit as a "magic-religious one"; bones, tablets and objects as a "sacrificial offering"; the human being as a Great Priest or a Shaman that was cremated during a sacrificial ritual (Vlassa 1962).

The Vlassa hypothesis is based on unstable archaeological ground but is less eccentric than many scholars think. His initial impression that the bones were burned might have been related to the spongy and foamy aspect of some of the big ones that also presented with holes and swellings. Not intending to make an anthropological analysis, N. Vlassa did not wash the bones.

Regarding the human sacrifice, this ritual was occasionally practiced in the Transylvanian Neolithic to ask for the protection of superhuman forces. There is much archaeological evidence that reveals, in a very concrete way, the sacrificial practices. A not so rare custom was to execute a human being as a foundation sacrifice when a new building of any importance was started: the burial at the base of the pillar in Căscioarele sanctuary was probably of this kind along with the child-corpse interred under a Turdaș dwelling after a bloody sacrifice. In the latter case the sacrifice of a pure and perfect creature as a child was a necessary step to consecrate the building.

However, in the Danube civilization there is evidence of the opposite pole: a malformed child⁶⁷ five or six years old was curled up in a basket-hands and feet tied forcing him into a contracted posture-and buried in a little pit on the top of the tell of Hârsova. It was found in 1993 during an archaeological program of French-Romanian collaboration between the Ministry of Culture/Francophone, (Directorate of Cultural Inheritance and Sub directorate of Archaeology) and the Romanian Ministry of Culture. From the preserved excrement found about the rectum, the researchers deduced that this was undoubtedly a deliberate death. The corpse was located among the foundation trenches, along the support posts of a large building. Are we in the presence of a foundation ritual connected with a sacred voluntary act of eugenics? According to the French-Romanian team, this hypothesis is supported by evidence at other tells.

Confident to have under observation the burned remains of a sacrificial ceremony, the excavator jumped to the unproven conclusion that a cannibalistic ritual had taken place in Tărtăria (Vlassa 1976: 31). This hypotheses was based on weak circumstantial evidence but this was not unfounded because there is documentation on a few cannibalistic ceremonies in the Danube civilization that were performed in order to communicate with gods and spirits. For example, only a few kilometers from Tărtăria at Orăștie, the remains of roasted human bones and crushed big bones for the purpose of extracting the marrow have been found. Two skullcaps were also found, having been cut just over the ocular arcade to hold them on the palm in order to use them for libation. In this case the bones were not used as food but as a tool (Luca 2001).

At Parța, Banat culture, level 6, there are many cases of foundation offerings in the buildings, especially in the sacred ones. In the foundation of the east wall of House P8, dwelling next to the Sanctuary 2 (with a monumental bust idol inside), three small pots with bones were found (Lazarovici et al 2001: 111). We have also discovered fragments of human jaws in level 7a, pit house 30, and in the hut 29 (Ibidem: 88, 275) and human bones in other pits too. In the river border, eastward from the site, on the bottom of pit III (a Tiszapolgár pit house, of 1,50 x 1,30 m), under the plastered floor, a quarter of a human skull (male) was discovered (Lazarovici et alii 2001: 275).

At Scânteia, site of Cucuteni A3, many human bones, 173 fragments, were discovered in the area of the houses or pits, fired or not (M. Lazarovici, D. Botezatu, L. Ellis, S. Țurcanu 2003: 297-306). In 1999 at Bolgrad (north-western Black Sea area) a large fragment of a human skull, among potsherds and animal bones, in a semi-subterranean dwelling belonging to the Gumelnița Culture was found by Newcastle University. Preliminary examinations at the Laboratory of the Institut de Palaeontologie Humaine, have shown the occurrence on the surface of the skull, three artificially perforated holes and grooves indicative of cannibalism (Dolukhanov 2000). This was the previously mentioned burial site of a child unearthed at the Hârsova tell. The discoverers have suggested that this indicates ritual cannibalism because of the

67 With a deformation of the skull and spinal column.

scattered human bones discovered among the remains of meals and various refuse in domestic waste zones.

Some scholars challenged Vlassa's interpretation of cannibalistic sacrifice and suggested that the Tărtăria human being was probably a priest, a shaman, a spirit-medium or a high dignitary (Chapman 1983) who died in a fire and was buried with ritual articles he valued while alive. Other scholars speculated that he was the supreme priest and that he had been burnt as he finished his serving time, according to the Sumerian tradition, as a sacrifice honoring the great God Saue (Tonciulescu 1996).

What really happened really in Tărtăria; a sacrificial ritual, a cannibalistic ceremony, a conflagration? Not any of them, for the following four reasons (Merlini 2004b).

Firstly, in the case of both ritual and secular cannibalism it is possible to find some selected remains (in particular from head, arms, legs). In the excavation at Scânteia (Moldavia, Romania) some remains of the skullcap and of the arms have been found (Mantu personal communication). In Iclod a buried beheaded man held a portion of his skullcap on his hand. Regarding the Tărtăria bones, we have found too wide a range of them and many are useless as food (i.e. ribs, hip-girdle and vertebrae). Moreover we did not find any skull fragments.

Secondly, in a banquet the bones are scattered on the ground among the remains of meals, sometimes as refuse in domestic waste zones or crushed by dogs. In Tărtăria they were packed and accompanied by ritual and high status artifacts.

Thirdly, the bones were broken in a natural way and not, for example, crushed to extract the marrow as that one found at Orăștie.

Last but absolutely not least, the bones are not burnt: not at all. The fragments of the big bones have traces of sponge/foam and are of a dark brown color; therefore it was legitimate to suppose was the consequence of thermic stress suffered by them during their past. It could have implied the partial or total carbonization of the collagenous converting it, by charring, into elementary carbon. We asked for chemical and anthropological expertise. Chemical tests at the Laboratory of the Department "Scienze della Terra" of La Sapienza University of Rome have excluded the processes of converting the bones into carbon. The dark brown color is instead due to the absorption of oxygen hydrate and insoluble humates coming from the burial place.

Only one bone, belonging to an animal, shows traces of scorching and it was mixed in amongst the human bones, which do not have evidence of burning (Lazarovici Gh., Miu 2004). Animal and human bones might have been placed together during the inhumation process, possibly in relation to rituals concerning the worship of a person who possessed some special and/or secret knowledge and became a revered and formidable ancestor.

Our working hypothesis is that the charred-like color of the big bones and the "exploded" appearance of some parts of them are also due to their discarnation process. We do not consider that the body preparation happened as an excarnation

by processor corpse dismemberment,⁶⁸ because we did not find any clear sign of knife, razor, blade, bird beak or claw or animal fang. The act of depriving or divesting of flesh was made by the simple decomposition of the body on the first burial stage or exposing it to natural events, although in this phase of the research we cannot exclude a very delicate mechanical bone cleaning of soft tissues, using for example fingernails as the tribe Chokta did in North America.⁶⁹



Figure 4.43: The fragments of the big bones are of a dark brown color and some parts of them have an “exploded” appearance as if they had been burnt; but this was not the case. The inscription on the box: OS (Romanian for bones); GRI (= groapă rituală i.e. ritual pit).

⁶⁸ In the same area, excarnation was typical of the Late Coțofeni culture (in tumuli).

⁶⁹ In a South American tribe Bororo the primary funeral takes place on the second-third day after death. The body is buried not far from water, 14 days later it is exhumed, the flesh is removed from bones; and then, during a feast, the skeleton is decorated and prepared for the final secondary burial.

One of the decarnation methods in the tribes of North Australia is described by W. Chesling: “The deceased is painted and dressed, then buried in the earth or placed on a special stage, or affixed to a tree. Later on, the deceased’s relatives pick up the bones and keep them until they find it possible to place them into a grave pillar decorated with ornaments. In an Arnhemland region, bones are extracted from the body, and flesh is eaten out...”. Decarnation also took place in the tribe Chokta of the southern part of North America; it was a duty of a specially chosen man to clean the bones of a deceased tribesman in 2-4 months after death with his fingernails. The flesh was burned and the bones ultimately buried within a year.

The little bones of the individual belonging to the tablets have an off-white color such as those from the chest and the shoulder-blade. This coloring might be related to long exposure under the sun's rays during the defleshing process (Lazarovici Gh., Merlini 2004). Similar situations and rituals have been recognized from the end of the Coțofeni culture up to the Early Bronze Age (Lazarovici Gh., Kalmar-Maxim 1987-1988; Lazarovici Gh. 1998; for the discarnation of Tărtăria bones viz Merlini 2004b). Our hypothesis has been supported by the anthropological expertise of Georgeta Miu from the Center of Biological Research which belongs to the Romanian Academy, Iași branch (Lazarovici Gh., Miu 2004).

If the bones are not charred the other two traditional hypotheses also fail: an accidental death by fire or a cultic sacrifice of the corpse by fire.

4.11 The Puzzle of the Corpse's Identity

In general the bones found into the ritual pit are supposed to belong to an adult man considered to be a priest, a shaman or a high dignitary on the basis of the associated artifacts and the cremation ritual designed for a very special person.

Nevertheless, the anthropometric analysis that the Prehistory Knowledge Project requested from the Centre for Anthropological Research of Romanian Academy of Science at Iași ascertained that the bones belong to a female, very ill and very old for the standards of the time. If the image of a ritual pit and a cultic context is accurate, we should discuss instead the Tărtăria priestess, shaman-woman or dignitary-woman. In this phase of the research we prefer to identify her as “Milady Tărtăria” and to indicate her as a “revered holy woman” as well as a prestigious one with a pivotal role in an inclusive community capable of only moderate formations of leadership and policies (Merlini 2004a: 289).

Let us try to outline the identity of Milady Tărtăria on the basis of the anthropometric analysis made at Iași by Georgeta Miu.

4.11.1 Sex and Age

The skull and pelvis are missing (from the latter there are only some fragments), so that sex and age determination of the subject has some limitations. Based on metric and morphological features of the long bones (entire or fragmentary) and others (collar bone, vertebrae, talus, heel bones, and fragments of the belt bones from pelvis area) we consider that she is a female of 50-55 years old. The age was estimated based on the resorption of the spongy tissue; the aspect of the pubic area and some particular pathological degenerative processes of some bones.

4.11.2 The Height

The height is 147 cm, indicative of a small woman. It was calculated on the basis of classical known methods (radius, cubitus and tibia length).

4.11.3 The Anthropological Type

Our analysis and conclusions are based on the small height of the subject and on the gracile features of the bones. We must keep in mind both the skull and the face bones are missing. Based on the available data, however, we believe that all these features indicate a Mediterranean type.

4.11.4 Paleopathologic Aspects

A degenerative process of the bones has been identified on the right femur (the cervix and the head of the femur). This degenerative-arthritis process contributes to the modification of the diaphysis aspect (the bone is thicker and shorter) and caused ankylose for the femoral articulation as seen in the image that compares the Tărtăria femur and a distorted one.



Figure 4.44: A degenerative process of the bones has been identified on the right femur.



Figure 4.45: Distorted vertebra.

It is possible to observe the same degenerative process on three dorsal vertebrae (maybe 6th, 7th, and 8th): the body of the vertebrae is half of a normal one in size because of the destruction of the tissue (on the right side). (Fig. 4.45) This kind of malformation did not cause neurological lesions. It is possible that this degenerative process also affected the ribs related to these vertebrae (some fragments show this process). The lower part of the articular surfaces of the pubis shows a similar destruction process.

We do not know the origin of these bone lesions, but they are associated with a high process of osteoporosis. All these degenerative processes may have produced great pain and it is probable that pain must have been a commonplace experience for Milady Tărtăria for the last 10-15 years of her life. But her death can be attributed to other causes.

The osteoporotic (osteoporosis) degenerative process that affected Milady Tărtăria was not a simply the 'silent process' that typically affects post-menopausal women and involves loss of bone mass but it was probably an acquired disease. A supplementary expert analysis done by Dinu Oneț, radiologist and physician at the Neuro-surgery Clinics of Cluj-Napoca, suggests some explanation for this kind of deformity. Radiological expertise and clinical analogies indicate at least three possibilities: gummatous osteoperiostitis, osteomyelitis or tuberculosis. We also do not exclude a form of syphilis, an ancient, endemic and not necessary venereal disease (Dennie 1962; Baker and Armelagos 1988; Marcsik 1994; Hershkovitz et al. 1995; Merlini 2004b).

Osteoperiostitis are skeletal lesions of infectious origins that commonly appear on the major long bones, especially the tibia (Steckel, RH, JC Rose, et al. 2002: 142-155). They are found as plaque-like deposits from periosteal inflammation, swollen shafts, and irregular elevations on bone surfaces (Ortner and Putschar 1985). Most lesions are nonspecific but they often are caused by *Staphylococcus* or *Streptococcus* organisms. Osteoperiostitis has provided information about patterns and levels of community health in the human past (Larsen 1997).

Pyogenic osteomyelitis (bone inflammation) is the most common kind of pathology seen in ancient skeletons and it is usually the result of infections of microorganisms that produce pus (Mays, Taylor 2002).

Tuberculosis osteo-arthritis is an ancient disease, caused by a bacillus (*Mycobacterium tuberculosis*) that probably predated the genus *Homo*. In Europe the earliest evidence of T. B. in humans was found in the region of Heidelberg (Germany), where a young male (5000 BC) was discovered with pathological evidence of tuberculosis of the spine and the 3rd and 4th thoracic vertebrae collapsed (Herzog 1998).⁷⁰

Regarding syphilis, endemic or non-venereal syphilis (treponematoses being caused by *treponema pallidum* or what is commonly referred to as bejel) and venereal syphilis are not the same diseases. In both cases skeletal involvement is extensive and ultimately fatal; however, their mode of transmission is quite different. The venereal form of the illness is transmitted by sexual contact, while the non-venereal form of it is transmitted by skin contact, occurring mostly in childhood (Ortner and Putschar 1985). The origin of syphilis is an ongoing debate, but early evidence of it was revealed by an Italian burial⁷¹ and a Polish one (Carter 1998: 532).⁷² Even though gummatous

70 According to most medical historians, Tuberculosis originally became a medical problem when man began domesticating cattle and other mammals which carry a form of the disease known as bovine tuberculosis. The consumption of infected meat and milk products eventually led to the transmission of the disease to the human population.

71 The discovery in 1992 of syphilis in a tomb at the Pantanello Necropolis (Metaponto) proved that that disease had existed in Europe 2,500 years ago. The presence of syphilis was detected by the examination of human remains. Sclerotic hyperostosis (the thickening and pocketing of the cranial wall) was an effect of this disease (Carter 1998).

72 For decades syphilis was thought to have been introduced into Europe by returning crew of Christopher Columbus, following his voyage to Haiti in 1492, as epidemics of this disease were unrecorded in Europe before then but spread across the continent from Spain soon after his return (Dennie 1962). Current osteoarchaeological evidence, however, supports the theory that the disease existed in both the Old and the New worlds prior to Columbus' voyage and that the syphilis of the 15th century was probably the adaptive transmutation of a New World non venereal disease brought back to Europe by returning sailors. When it reached Europe, non-venereal syphilis transmuted and became a particularly virulent venereal disease (Baker and Armelagos 1988). Before these epidemics, syphilis was simply not diagnosed as a separate disease and was often confused with leprosy. There was a reference to "venereal" leprosy and "hereditary" leprosy in the 13th and 14th century. But leprosy is not spread by sexual intercourse and not passed from infected mother to infant, syphilis is. (See also Herskovitz,

osteoperiostitis, pyogenic osteomyelitis, tuberculosis and endemic syphilis behave differently,⁷³ the symptoms of each are quite similar and they affected Lady Tărtăria in her early age.

4.11.5 The Posture

It is apparent that Milady Tărtăria limped on her right leg since her youth because of her thicker, ankylosed and shorter right femur and leg. She had a posture forming a > (an arrow) because of the degenerated, decalcified and fragile spine. She had also the tendency to angle towards the right because scoliosis had deformed the right side of her chest and her right shoulder. There is an unpublished Neolithic figurine kept at the National Museum of Athens that can give an idea of the appearance of Milady Tărtăria.

4.12 We are not Dealing with a Ritual Pit and a Votive Deposit but with a Consecrated Grave of a Novel Ancestor

Now that we have accumulated more evidence about Tărtăria, let us go a little deeper into the relationship between the revered and formidable holy woman, her abode, the ritual pit, the cult inventory, and the tablets.

With reference to the intricate interactions between the first three elements, following the same lines of plane at the north and south profile of the Vlăsa excavation it is possible to relate Fig.4.27 (depicting the north profile of G trench and the ritual pit) to Fig. 4.38 (regarding the south profile of G trench and the pit house). The results are synthesized by Fig 4.46 which connects in the same image the ritual pit and the pit house; therefore the two structures were not only contemporaneous but they also belonged to the same archaeological complex under the same roof and they were functionally connected.

In Neo-Eneolithic times it was not infrequent throughout South-eastern Europe that household activities occurred in areas near pit houses. We suppose that Milady Tărtăria lived in the pit house and kept the sacral inventory inside the “ritual pit”, a sort of box with magic tools, which was in fact located under the same roof and possibly provided magical protection of the abode. The cult associations are important because they connect the inscribed tablets and the ritual paraphernalia, and relate both these

Rothschild, Wish-Baratz and Rothschild 1995; Marcsik 1994. The history of tuberculosis and syphilis in ancient Egypt is outlined of in Armelagos and Mills 1993).

73 For example, syphilis of bone is commonly symmetrical, pyogenic osteomyelitis is less so and articular surface lesions of tuberculosis are usually asymmetrical unlike other forms of arthritis. (See “Last Lecture: Paleopathology” in *Anthropology* 156, Spring 2002).

to a building with a special function. Indeed they make a little more intelligible the functional relationship among ritual pit, pile of liturgical artifacts among which tablets bearing signs and dwelling under the framework of an passionate magic-religious life with elaborate symbolism and intense ceremonialism developed by a small early farming community with a not very marked social hierarchy.

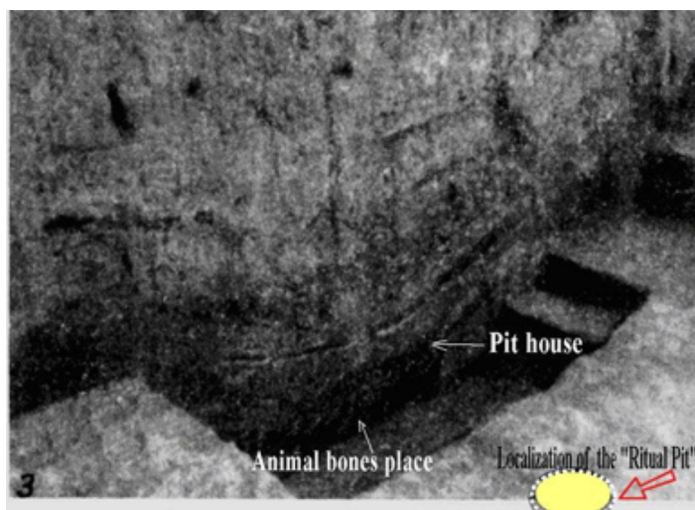


Figure 4.46: Our reconstruction of the connection between the ritual grave and the pit house on the basis of a revision of a Vlassa's photo.

Scholars are divided on the existence of temples, sanctuaries and community altars in those times because some still maintain that liturgies were held solely within the household field.⁷⁴ Milady Tărtăria's dwelling possibly evinces another kind of sacral

⁷⁴ The monumental bucrania found at Gomolava (Brukner, 1988: 33, 3/7-8; Lazarovici et al., 2001, I.1: 275-276, 297-298, fig. 250/1-2, 250/3), Vinča (M. Garašanin, 1958: 20; D. Garašanin, 1968, fig. 28; Babovic, 1984, cat. 212; Staljo, 1986, cat. 218), the monumental human heads found at Fafos, Predionica (Staljo, 1979, cat. 264) and Zorlențu Mare (fig. 29, in House 4) the existence of sanctuaries, sanctuaries and communitarian altars (Lazarovici Gh, Lazarovici M. 2003). The presence of several communitary sanctuaries at Magiare, Vrbska Humka (in Macedonia at Vinča A-Starčevo-Criș level, information Garašanin, 1981, 1984; Sanev, 1988: 9-10), Parța and Kormadin at Mânăstioara-Cetățuia, Vrancea district (Romania orientale), Căscioarele (Romania meridionale) evidences the existence of religious structures. Several clay models of Trypillian houses and temples have been found, which help to reconstruct (reproduce) ancient architecture. An interesting collection of clay temples has been collected by Sergej Platonov of late. Literally, these finds corrected our notion about prehistoric architecture of Old Europe between 4200-3500 BC. One of them represented rectangular in plan building on platform, based on six strong pillars. The roof of the temple is semicircular, frontons

layout that was neither a temple or a shrine (completely dedicated to religion) nor an ordinary dwelling (where the sacred space was limited to a fireplace/oven and/or an altar). In the Tărtăria dwelling a substantial area might have been devoted to and specialized for magic-religious rituals while the rest might have been associated to daily life; nevertheless it was a daily life which was always and with every action connected to the spiritual path of the initiate. We postulate the existence of special abodes belonging to old holy ladies, often related to the numerology of the 7. Such hypothesis is sustained by two religious discoveries from Poduri and Isaiia (in Moldavia, Romania) both containing 42 pieces (Lazarovici Gh., Merlini 2004). Milady Tărtăria's home might have been a structure comparable with the present-day ashrams of sadhus⁷⁵ in Hindu culture: dwellings with a living room as well as a retreating room with a large corner area consecrated to liturgies or with a second room set apart and specialized for cult.

A crucial point for the interpretation of the function of the tablets and their signs is that Vlassa and most of the scholars consider the pit a cultic sacrificial hallow filled with a votive hoard, a dedication deposit, or a pile of offerings. In fact it was a cultic pit during the life of Milady Tărtăria but after her dead it became a ritual grave. Her bones underwent a defleshing process that could have required a period of between some months to 6/7 years. After the stripping of the flesh, bones and some of her tools may have been returned to the abode where Milady Tărtăria had spent her life. It is possible that during this time-lag the house was abandoned. We can relate the first filling levels to this period (Lazarovici Gh., Merlini 2004). It means that pit and pile of objects would not be ordered in a straightforward manner and should not be perfunctorily read through the categories of giving directed to an other-worldly power and for supernatural returns (votive deposition). Instead it should be understood primarily through the category of death liturgies of a socially significant individual that reflect the social standing of deceased. Consequently at Tărtăria the human body constituted a form of dedication and a means to facilitate communication with superpowers only through distinctive death liturgies and burial in a sacralised space.

The shape and the extent of the ritual grave did not permit the deposition of a buried person and this fact confirms that the human bones had been placed there

are decorated with a crescent, which is similar to bull (or cow?) horns. The entrance to the temple is represented as an arc, decorated with five images of crescents. The walls are decorated with anthropomorphic pillars and spiral snake symbols. The model was covered by red paint, and an incised ornament was enched with white paint. On other models roofs were painted, it looks like they were covered by rush floor-mats. The best example of a communitary altar is the sanctuary at Kormadin, Vinča C level (Jovanović, 1960; 1991 and bibl.; 1991; Sandars, 1968/1985: 203, fig. 179b). In the Sanctuary at Kormadin (fig. 50) the cult furniture, including decorated boxes with places for offerings, columns, monumental idols, walls decorated with sacred symbols is related to a naology as at Parța (Lazarovici et al., 2001).

75 A holy man, sage, in general with ascetic style of life.

after the defleshing process. The Tărtăria pit may be evidence of a secondary burial. Did a double funeral rite occur with the deposition of the disarticulated skeletal remains, the tablets, and the core part of every associated object? If one follows the Krum Băčvarov's suggestions about the Bulgarian Neolithic on secondary burial as a conclusion of a two-stage process of post-mortem body treatment, the Transylvanian reburial was based on some kind of public rite of devotion or initiation (Băčvarov 2003). The context of a previously occupied site suggests that the deposition in a pit was possibly associated with socialization of the dead and ancestor worship constituting an exchange between the living and the neo-ancestor for the purpose of consecrating or at least symbolizing the continued significance of a distinctive ancestral place. The deposition of the hoard in a house apparently reinforced the principle of the concentration of finds and ritual in the domestic domain, but one has to remember the above-mentioned particularities of Milady Tărtăria's dwelling.

At Tărtăria the two principles of fragmentation (the bodily dismemberment and the deliberate breakage of objects, and the sharing of both kinds of fragments among people) and accumulation (grouping and interring together in a set the emblematic parts of the body and the artifacts) worked together, thereby reinforcing distinctive social relations and identity (on a household, ancestral lineage or community level).

Georgeta Miu has observed that the skull and many small bones are missing; in particular those from palms, feet, and pelvis even if from the last some fragments remain. The absence of fragile bones might be the result of a natural processes of defleshing and disarticulation (Lazarovici Gh. 2000), but what about the other bones? Fragments of them might have been utilized to connect the most recent ancestor, Milady Tărtăria, with her living kinsfolk or/and might have been passed on to enchain a third party. The relationship by means of fragmentation and socialization processes might have involved not only the revered and prestigious holy woman's tools but also her skeletal material.

As of yet we are unable to explain the absence of the skull bones. In many cases of corpse decarnation, skull bones as well as teeth still exist even if the small bones of the face have disappeared. Therefore, we presume that the absence of the bones from the cranium might be related to its relocation due to the skull cult (our opinion and bibliography, Lazarovici Gh.-Maxim 1995). Nevertheless we have to verify once more the documentation from the older excavations, made by Horedt and Vlassa, to be sure that some bones have not been mixed in with other materials or misplaced at the moment of clearing the profile. (Fig. 4.38) The last possibility is supported by Vlassa's photos, where it is apparent that the pit was truncated (Fig. 4.27) (Lazarovici Gh., Merlini 2004).

4.13 Milady Tărtăria and her Casket with Magic Tools

The social life of cult inventory has two phases: before and after the death of Milady Tărtăria. With regards to the first phase, one can observe that the most of the artifacts belong to different cults related to fertility and fecundity and their sovereign mysteries (the female divinity and her hypostasis: Mother Earth, Fertile Mother, giver and taker of life, holy darkness of the womb, divinity of pregnancy, protector of life, mistress of animals and plants etc.). Extremely sacred objects, they were possibly surrounded by taboos (as highlighted by the results of overlapping two of the tablets) and employed in an elaborate cycle of rituals involving every stage in cultivation, preparation for war, ritual initiation, death. These formalized ceremonies were probably accompanied with song, dance, and music. Every figurine of the ritual pit is wearing an elaborate mask which possesses, impersonates and expresses its resident power during ceremonial rituals: a mythological being, an animal spirit, the spirit of a dead, a human or totem ancestor as well as a deity and another being believed to possess power over the living. The context portrays Milady Tărtăria as a cult leader and perhaps a full-time specialist. Of course questions pose more questions. One can note at a glance that some figurines have a phallus-like shape, but why have they been modeled in such a particular form?

We have already concluded that the artifacts were not “items of faith” deposited in an act directed at communication with or concerning supernatural powers in hope of a return (magic protection, success, health, the flourishing of crops, animals or family) but were instead deposited in a funerary complex in connection with death rituals. Some of them were broken, intentionally or unintentionally, and buried as incomplete items, while others are entire and interred as complete items. After Milady Tărtăria’s death, her liturgical tools were possibly broken during a ceremony. It is of course theoretically possible that these objects might not have been necessarily ritually “killed” but that they were broken accidentally or by misuse, but one has to observe that the presence of magic-religious, exotic, not functional, and more or less precious items would mark a very unusual pattern of a discard collection. Secondly, the figurines made of clay have been deliberately divided in two parts, retaining the entire upper part (head included), for burial in the pit. Therefore they would have been submitted to an intentional and methodical breaking process. Closed eyes and the absence of a mouth are peculiar to some of them and they are both traits that remind us of the dead. In a process that transforms matter into being, it is possible that some figurines were manufactured at the time of Milady Tărtăria’s death and were used in rituals to represent the newly dead; once the spirit of the person was free or during the secondary reburial process the figurines may have been broken and sacrificed, in an act of tying the living into the power of the neo-ancestor and by doing so asserting a political claim of continuity and belonging.

However, their deposition as incomplete items was due not to the fact that they were discarded as refuse because of their broken state but was because of a fragmentation

ritual. This could be connected: a) to the rupture of the relation between their owner and the divinity; or b) to an enchainment procedure enacted through the fracturing of some objects into fragments that were shared among kinsfolk, acquaintances and associates in order to establish a magic relationship between the newly dead and the living; or c) to the spread of some fragments throughout the settlements and the fields to guarantee fertility (Chapman 2000; 2001). The core part of every sacral tool was not dispersed but it was collected in a hoard associated with the tablets and was buried in the ritual pit during a devotion or initiation ceremony or it was simply kept apart.

If some fragments of the intentionally broken figurines were possibly circulated among the living in order to enchain the ancestor and people with the same ancestor acting to solidify the group at the same time, it is important to observe that the deposited parts of the whole are so distinctive that the whole is obviously represented. This raises the question of why the inscribed tablets are the only entire artifacts? This interaction between fragments, parts as a whole, and complete items is an important issue for future exploration.

4.14 Transylvanian Tablets and the Sacred Script for Initiates

The problem of the signs from the tablets and what is meant by them is a very complex subject. Tărtăria markings are believed by a growing number of scholars to be a very early form of writing and not just symbols but the interpretation of them is far from being deciphered. Some researchers have dared to give a definite meaning to those signs, but for them the tablets act as some sort of Rorschach test where people project into the inkblots the fantasies they already have in their mind. In any case the new archaeological data we are presenting in this article compels us to develop some semiotic considerations about the genetic code of the emblematic signs of Tărtăria (Merlini 2001; 2002a; 2002b; 2004a; 2005).

At first the Tărtăria tablets provide evidence that the Danube Script was mainly a sacred system of writing employed in liturgies and in expressing magic-religious beliefs. It was not primarily used for commercial transactions or for recording administrative documents, but for communicating with the super-human forces. In fact inscriptions have been often found on objects-such as tablets as well as clay female figurines, votive offerings (sometimes ex-votes), libation vases, miniature vessels, spindle whorls, seals, temple models, and loom weights-all connected with a religious context. In particular our working hypothesis that we are in the process of verifying, is that the tablets and their signs could be associated in some direct or indirect way with magic, malefic liturgies.

The Tărtăria tablets attest also that the Neo-Eneolithic communities of the Danube basin were just at the first stages of the development of a script of literacy. It is a very archaic system of writing and possibly not capable of encoding extended speech or long narratives because its phonetic elements are not present or they are too limited

to render in writing. It probably consists of a mix of logograms, ideograms, pictograms and only some phonetic elements that are occasionally and marginally marked. The writings' connection with the conceptual sphere is much stronger than the connection with the phonetic sphere. Other ancient writings of this type are the Elamite script, Indus script, hieroglyphs of the Phaistos disc, Chinese writing on oracular bones, and the Olmecs glyphs.

If 7,300 years ago the Danube Script was in *statu nascenti* and a considerable part of it was a key element of the religious-mythical system, its signs consequently often possessed the same outlines of sacred symbols, in particular the geometrical and abstract ones, whence they were derived. This frequently originates confusion for the researchers employed to crack Danube Script code, but also serves to witnesses that some of signs of this system of writing have their origin in the sacred language of symbols.

The religion was a system of symbols and texts by which human beings communicated with their culturally defined universe characterized by super-human powers as well as human powers. Common models of ritual action,⁷⁶ embedding symbols and texts,⁷⁷ realized the extra-human and inter-human communication, mediating also between the individual's conflicting needs for self-expression and self-containment.

The Tărtăria tablets point out the mainly cultic, initiation-ritual nature of the Danube Script. Indeed many meanings might be esoteric and revealed only on the occasion of specific initiations (Lazarovici Gh., Merlini 2004). The question of the non-visibility of some texts is indicative of magical associations and sacral meanings of the Danube Script connected with initiation processes. It is not by accident that texts were sometimes present on non-visible portions of the ritual tools. For example the magic-religious inscriptions positioned along four rows on the Gradešnica platter were visible only when it was moved, stored, or transported, but not when it was in use. During the rituals they faced the ground: possibly for the giving and the taking of earth-forces. Was the non-visibility not only a supplementary symbolic meaning but also an integral part of the symbolic message and a necessary condition for setting the symbols and inscription into motion (Merlini 2005)? Also the cultic, discoid medallion recently found at Turdaș and belonging to the early phase of the Turdaș culture, had been used with its inscription facing the ground. In this case the inscribed artifact was located in the middle stratum of a pit among the ashes of a deep, steep dwelling, maybe a granary or a shaman's habitation, and it accompanied six vessels containing cereals (Luca 1993; Merlini 2004a).

⁷⁶ For ritual action we mean not only formal rituals performed by consecrated professionals, but also many acts of everyday household life which were imbued by religious-mythical significance and incorporated utilitarian and symbolic functions (Viz. Nikolova on-line who researched three case studies in depth: spinning and spindle-whorls, ornamented pottery and burials in the villages).

⁷⁷ Victor Turner even considers the rituals as aggregations of symbols (1975: 59).

Regarding the Tărtăria tablet it is noteworthy to consider the possibility of overlapping the two tablets which both bear a round hole and are divided into cells. Indeed, the hole on the rectangular tablet fits perfectly the hole on the circular one and the former tablet perfectly covers the upper register of the latter with their cells in perfect alignment. This could mean that the two tablets were worn as necklaces, one over the other, as pendants and the resulting compound between the rectangular and circular tablets may have created a relationship of overt (seen) and esoteric (hidden) signs (i.e., the signs on the upper register of the circular tablet would have been covered). The fact that the two punctured tablets could have been utilized as superimposed exoteric and esoteric amulets is indicative of the magical associations of the script (see Makkay 1968: 286; Hood 1967: 111; Reiner 1960: 148 ff.). Was the sacred assemblage particularly used during initiation ceremonies (Merlini on line, Lazarovici Gh., Merlini 2004)? If this was the case, it does not facilitate any attempts to decipher the incised signs since one is dealing with texts that challenge the un-expressible; texts that not only reveal but also conceal and sidetrack, and finally that indicate something to mean something else.



Figure 4.47: Two tablets can be worn as a pendant one over the other.

4.15 Conclusions

Our investigation reconstructed quite clearly the discovery circumstances of the Tărtăria tablets:

- In Romanian historical context where the cross section excavation was at that time not used in any archaeological investigation, Vlassa sketched the stratigraphy of the trench dig at Tărtăria but did not put the ritual grave inside it: firstly, because

the drawing was made by him and Attila Laszlo the penultimate day of the excavation campaign at a distance of around 150 cm from the place the pit was unearthed the subsequent and last day; and secondly, because he undervalued the discovery before the recognition of the incised signs in the laboratory.

- The tablets were wet, soft and covered with limestone.
- Confusing a sort of “Neolithic cocchiopesto” (pulverized live calcium mixed with water in order to bind clay and sand) with a presupposed calcareous crust and thinking that the abundant calcium was due just to the humidity inside the pit, the restorer put the tablets under a hydrochloric acid treatment, removing not only the superficial calcium as a slip but also destroying their internal structure from the surface.
- Vlassa noticed the incised signs and realized the importance of the discovery only after the cleaning of the tablets.
- In order to contrast the fragility of the pieces, due to many cracks that appeared during the process of cleaning with hydrochloric acid, Vlassa decided to saturate the tablets in a vacuum autoclave baking them. Nobody knows how long and at what temperature they were baked, but it should not have been over 100-150 degrees to avoid ruining them.
- After having recognized that the tablets were inscribed with signs of writing and having well in mind the arguments of the critics on stratigraphic data, in the last period Vlassa listed five scholars who stood against his interpretation who were overshadowed by the 30 who “supported and completed” his point of view as well as TV and radio programs, press articles and the presence of the inscribed tablets in school books (Vlassa 1977: 15-18). Considering to have carefully published his discovery, he spent more efforts on the hypothesized Mesopotamian influences in Transylvania than on the description of the excavation and its findings.

Re-publishing the artifacts found in the sacral grave with the tablets, we verified that they and the tablets belong to the same assemblage and challenged some scholars’ insinuations (perhaps in an effort to explain the incongruity of the inscribed signs with their expectations on dating) that the tablets had intruded into the Vinča layer from higher and later levels. Indeed the stratigraphic situation that we settled allows a direct association between the tablets and the other finds. Also, the best typological parallels indicate a similar date for the tablets and the other objects, their position in the early phase of the Vinča culture, and their belonging to the central territory of the Danube civilization, i.e. the Vinča area. This is the case even though there is not a close stylistic resemblance between the Tărtăria figurines to those of others from the same cultural complex if we do not limit the comparison to a single or double feature.

Our analysis of the mixture and paste of the tablets under the microscope rejects the hypothesis that they could be a modern or ancient forgery, or even a Near East import. We verified that all the tablets are made of the same material that was from local sources and contains a very small quantity of clay and a lot of sand. This

composition means that they cannot be analyzed by ^{14}C method not only because of the thermic stress they would have to endure, but fundamentally because they mainly contain sandy clay. Because the tablets were made of a sort of “Neolithic cocchiopesto”, the acid bath they suffered at Cluj museum did not affect just their surface, but it also ruined deeply the calcareous inclusions and the binding of the material. If the chemical action cleaned the calcareous deposit from the surface of the artifacts, at the price of their internal structure, a high concentration of calcium carbonate is still present inside the tablets and is slowly exiting at a rate that will ensure that in a number of years they will again be covered by a white surface.

The ^{14}C analysis assigned an age of 6310 ± 65 yr BP (calibrated 5370-5140 BC) to the human bones recovered with the tablets in the ritual grave. It therefore confirms the placing of Tărtăria complex into early Vinča culture as the discoveries from Liubcova, Orăștie, Turdaș I and Uivar, or into the Starčevo-Criș IVA culture (contemporary with Vinča A2), as those from Cârcea, Banat culture I (Lazarovici Gh., Merlini 2004). Metabolizing N. Vlassa's information and making some graphic inferences, we made a complete revision of the discovery circumstances establishing the precise location of the ritual grave and setting up the stratigraphy of the trench where it was unearthed.

The analysis of the human remains allows us to challenge the mythical and consolidate assumption that a human sacrifice, a cremation during a sacrificial ritual, a cannibalistic ceremony, or a conflagration occurred in Tărtăria. The pit could instead be evidence of a secondary burial as a conclusion of a two-stage process of post-mortem body treatment. A double funeral rite occurred with the deposition of the disarticulated skeletal remains together with the tablets and the core fragments of every associated object during some kind of public rite of devotion or initiation possibly associated with the socialization of the dead and the worship of the deceased person who possessed some special and/or secret knowledge and became a revered and terrific ancestor.

In fact the anthropometric examination ascertained that the bones belong to a very special person: a female, Mediterranean type, very old for the standards of that times (an age of 50-55), very ill and in pain (due to a degenerative-arthritis process causing malformation since her early age), limping on right leg and having a posture forming a > (an arrow) since her youth. Crossing the analysis of the human remains with the ritual pit and cultic context, we can identify her as a “revered holy woman” with a pivotal role in an inclusive community: “Milady Tărtăria”.

The radiocarbon data sustains that the sacral pit containing the tablets is coeval with a nearby pit house. Archaeological evidence establishes that the ritual pit and pit house are contemporaneous, belonging to the same complex under the same roof and that they would have been functionally connected. Milady Tărtăria, a cult leader and perhaps a full-time specialist, lived in the pit house where she kept her liturgical artifacts, among which were the inscribed tablets inside the “ritual pit”, a sort of box with magic tools. If scholars are divided between those who maintain the existence of

temples, sanctuaries and community altars in Neolithic age and those who limit the presence of liturgies within the domestic domain, Milady Tărtăria's dwelling evinces another kind of sacral layout that was neither a temple nor a shrine (completely dedicated to religion) nor an ordinary house (where the sacred space is limited to a fireplace/oven and/or an altar). Instead it was a dwelling with a substantial area devoted to and specialized for magic-religious rituals and the rest was associated with daily life; albeit a daily life connected with the spiritual path of the initiate. We postulate the existence of special abodes belonging to old holy ladies, often related to the numerology of the 7.

A crucial point for interpreting the meaning and function of the tablets and their signs is that the pit is not-as is commonly considered-a sacrificial pit full of offerings, but that it is ritual grave. In fact, it was a cultic pit during the life of Milady Tărtăria but after her death it was transformed into a consecrated grave and during a ceremony her remains, as well as key fragments of her tools, were returned to where she had spent her life. Therefore, the pit and pile of objects, inscribed tablets included, should not be perfunctorily read, as is generally done, as an offered "means of faith" to facilitate communication with an other-worldly power or in hope of supernatural returns (votive deposition). Instead it should primarily be identified through the category of socially significant death liturgies and burial: reflecting the social standing of deceased need, performing ancestor worship, constituting an exchange between the living and the neo-ancestor, and making holy or at least symbolizing the continued significance of a distinctive consecrated space. At Tărtăria the two principles of fragmentation (the dismemberment of the revered body and the deliberate breakage of magic objects and then the sharing of both kinds of fragments among Milady Tărtăria's living kinsfolk as well as passing them on to a third party) and accumulation (grouping and interring together in a set the emblematic parts of the body and the artifacts) worked together, thereby enchainning the most recent ancestor with the living persons and reinforcing distinctive social relations and identity.

In conclusion on this point, the social life of the inscribed tablets and the other cultic artifacts has two phases: before and after the death of Milady Tărtăria. Regarding the first phase, in the present article we advanced some hypotheses about the cultic inventory with its correlate liturgies and sovereign mysteries. Among these, we pointed out the presence of speaking or singing figurines. We also observed that only the tablets are entire and interred as complete items, while all the other cultic objects were submitted to an intentional and methodical breaking procedure and were deposited as incomplete items. In a process that transforms matter into being, it is possible that some figurines were manufactured at the time of Milady Tărtăria's death and were used in rituals to represent the newly dead and were then broken and sacrificed in order to tie the living into the power of the neo-ancestor and by doing so, asserting a claim of continuity and belonging. Additionally, some artifacts might have been surrounded by taboos and others may have been employed in rituals that are considered contemporarily to be of "black magic". These occurrences pose new

questions about the identity of the buried person and about the possible connections between the tablets and their signs.

The last query remains: if the Tărtăria tablets are so ancient as to be employed by some scholars as the icon of the possibility that South-eastern Europe developed in Neo-Eneolithic times its own system of writing which predated the Near East regions by 1000-2000 years, are we certain that that they are actually bear written signs? Are we confident to consider that they are the earliest attestations of an old European form of writing and not merely bearers of symbols? In this article we presented some working hypotheses on the genetic code of these emblematic signs, but this complex issue is a key question for future investigations.

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Cătălina Semuc and Alexandra Comșa

5 About the Prehistoric Burial Rites, Rituals and Anthropological Data in Dobroudja (Eneolithic-Iron Age)

5.1 Introduction

In our contribution we will try to offer an image of the prehistoric funerary monuments in the Romanian Dobroudja, namely between the Danube to the north and east and the present border with Bulgaria, without hampering in any way the interpretation concerning the funerary rite and ritual on the Lower Danube and western coast of the Black Sea as a whole. As Cristian Schuster and Alexandru Morintz will refer in the present volume to the prehistoric sites (Bronze and Hallstatt period) of the same region, we will not tackle the range of the various cultures. Yet, we will do it for the Neolithic and transitional period to the Bronze Age.

In order to have a clearer image regarding funerary monuments, we have adopted the method of Valeriu Sîrbu, exposed in the volume entitled *Funerary archaeology and sacrifices: an unifying terminology*. We have to stress here also, that we do not have complete information for all cultural manifestations; this situation is due both to objective and subjective reasons all of which are connected with the research mode and publication of the results obtained from the field investigation.

5.2 Archaeological Data

5.2.1 Early Eneolithic Period

5.2.1.1 Hamangia Culture

This cultural manifestation comprised parts of north-eastern Bulgaria along with the Romanian Dobroudja, (Hașotti 1997: 17-18). The origin of the culture is likely located in Anatolia (Hașotti 1997: 15-17).

Necropoli: Cernavodă-Columbia D (Constanța County) (Hașotti 1997: 28-29, with older literature-Berciu, Morintz, Roman, 1959: 95-103) comprises 556 individuals and was dated in the second half of the 4th millennium and the first half of the 3rd millennium B. C. Limanu (Constanța County) (Hașotti 1997: 32, with older literature-Berciu, Morintz, Ionescu, Roman 1959, 49-54)-two individuals, a woman and a child, the latter being anthropologically studied and aged at four years. Unfortunately, the necropolis on that spot seems to have been destroyed by the works at the dam on the Mangalia Lake.



Funerary rite: In the necropolis at Cernavodă-*Columbia D* the funerary rite was inhumation in flat burials, in supine positions, most of the individuals with a SE orientation. At Limanu, inhumation was also present.

Position of the skeletons: At Cernavodă-*Columbia D* there was a slight inclination of the body to the right, with the left arm being placed in different positions. There are also few flexed skeletons that have been mentioned. At Limanu, due to the fact that the necropolis was destroyed, the position of the skeletons is not known.

Grave goods: polished stone implements (axes, chisels) were usually placed near the skull, along with ceramic vessels and burnt clay figurines (featuring standing or sitting personages). The most renowned statuettes are the so-called "*Thinkers*" of Cernavodă, a man and a woman (presumably spouses) sitting on separate short chairs. In some burials, pendants or other shell-made adornments were found. Archaeologist Puiu Hașotti maintains that the ceramics in the settlement were significantly different from the one in the burials so their comparison is rather difficult (Hașotti 1997: 28). Also, in many burials animal bones (most frequently boar) have been discovered (offerings?).

Anthropological data: Out of this cemetery, comprising 556 skeletons or their parts, some individuals could not be entirely exploited for their anthropological features, but all of them could be used for their demographic significance. The repartition of the individuals by sex is rendered in Table 5.1, Fig. 5.1 and 5.2.

Table 5.1: Distribution on age and gender categories of the individuals from the necropolis Cernavodă-*Columbia D* (Hamangia Culture) (apud Olga Necrasov et al., 2000: 182-185 and table no. 4).

NEOLITHIC BURIALS	Cernavodă	Limanu
II. FUNERARY MONUMENTS		
II. 1. TYPES OF RITES IN NECROPOLIS GROUPS OF GRAVES AND SINGLE GRAVES		
inhumation	*	*
II.2. TYPES OF GRAVES		
with dead	*	*
II.3. TYPES OF MONUMENTS		
necropolis	*	*
II.4. OUTSIDE SHAPE		
A. NECROPOLISES		
flat necropolis	*	*?
II.5. TYPES OF COMPLEXES		
tombs	*	*
III. MONUMENT WITH NON- CREMATED HUMAN BONES IN NON- FUNERARY CONTEXTS		
III.1. THE PLACE OF BONES IN PITS		
01. no data available	*	*

Table 5.1: Distribution on age and gender categories of the individuals from the necropolis Cernavodă-Columbia D (Hamangia Culture) (apud Olga Necrasov et al., 2000: 182-185 and table no. 4).

NEOLITHIC BURIALS	Cernavodă	Limanu
02. on the bottom of the pit		
IV. UNDERGROUND FITTING OUTS = PITS		
A. SHAPE		
01. not mentioned, because of the damage	*	*
02. not identifiable	*	
B. QUALITY		
excavated especially	*	*
V. DEAD		
V.1. CHARACTERISTICS		
A. DEPOSIT PLACE		
in pit	*	*
B. TYPES OF RITES		
normal inhumation	*	*
C. GENDER		
01. no data available	*	
02. male	*	
03. female	*	*?
04. unidentifiable (child)	*	*
D. AGE		
01. infans I (0-7 years)	*	*
02. infans II (8-14 years)	*	
03. adultus (21-30 years)	*	
04. maturus (31-60 years)	*	*?
V.2. INHUMATION		
A. SKELETON CONDITION		
01. no data available		*
02. entire end anatomical condition	*	
03. incomplete (lacking parts)	*	
04. isolated bones	*	
B. POSITION OF THE SKELETON		
01. no data available		*
02. laid on the back	*?	
C. ORIENTATION		
01. no data available		*
02. head towards SE (123°-146°)	*	
03. head towards S (169°-191°)		*
D. HAND POSITION		
01. no data available		*
02. both hands laying the alongside the body		*
03. hands are in different positions compared to one another	*	
VI. GRAVES GOODS		

Continued **Table 5.1:** Distribution on age and gender categories of the individuals from the necropolis Cernavodă-Columbia D (Hamangia Culture) (apud Olga Necrasov et al., 2000: 182-185 and table no. 4).

NEOLITHIC BURIALS	Cernavodă	Limanu
A. STATE OF PRESERVATION AT THE TIME OF THE DEPOSIT		
01. complete	*	*
02. fragmentary (over 50% of the item)	*	
B. CAUSES OF DETERIORATION		
no data available	*	*
C. MATERIAL		
01. clay	*	*
02. rock	*	*
03. silex		*
04. marble		*
05. sea shells	*	*
D. TECHNIQUES		
01. hand modeled	*	*
02. carving	*?	
03. grinding		*
04. piercing		*
05. incising	*	*
06. grooving		*
E. DECORATIVE MOTIFS (pottery vessels)		
01. not-decorated	*	*
02. incised lines	*	*
03. zigzag lines	*	
04. geometrical motifs	*	*
05. grooves		*
VII. TYPES		
VII.1. INVENTORY (exclusively ceramic vessels)		
A. WEAPORY, FIGHTING GEAR END HARNESS ITEMS		
axes	*	
B. WORKING TOOLS AND HOUSEHOLD GEAR		
01. chisels	*	*
02. axes	*	*
03. grinders	*	
04. silex blades	*	*
C. ADORNEMENTS		
01. bracelets	*	*
02. rings	*?	*
03. beads	*	*
04. pendants	*	
D. CULT ITEMS		
01. anthropomorphic statuettes	*	

Table 5.1: Distribution on age and gender categories of the individuals from the necropolis Cernavodă-Columbia D (Hamangia Culture) (apud Olga Necrasov et al., 2000: 182-185 and table no. 4).

NEOLITHIC BURIALS	Cernavodă	Limanu
02. sea shells	*	*
VII. 2. OFFERINGS		
A. VESSELS		
A1. NUMBER OF VESSELS		
over 4 vessels	*	*
A2. CENTER OF PRODUCTION		
no data available	*	*
A3. TYPES OF CERAMIC VESSELS		
1.a. TYPES OF UTILITARIAN VESSELS		
01. bitruncated vessel	*	*
02. cylindrical vessel	*	
03. globular vessel	*	*
04. pedestalled cup	*	
05. mug (decanter)		*
06. tumbler	*	
07. lid	*	
A. POSITION OF THE INVENTORY IN THE TOMB		
INHUMATION		
01. no data available		*
02. at the head	*	
B. MEAT		
B.1. RITE		
not cremated	*	
B.2. CONDITION		
animal parts	*	
B.3. SPECIES OF ANIMALS		
01. Bos taurus	*	
02. Sus scrofa sus	*	
03. Ovis-capra	*	
04. Canis familiaris	*	
B.4. GENDER		
no data available	*	
VII.3. TIME OF INVENTORY DEPOSING		
put together with the inhumation	*	*
VII. INFORMATION TYPE		
systematic research	*	*
IX. ORIGINE		
unable to determine	*	*

Cernavoda - Columbia D

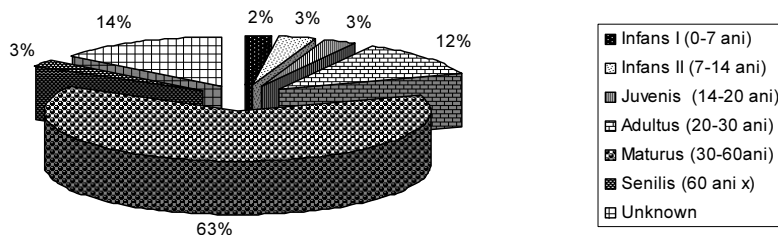


Figure 5.1: Proportion on age categories in the skeleton series from Cernavodă-Columbia D (Haman-gia Culture).

The gender of the individuals in the Neolithic site from Cernavoda-Columbia D

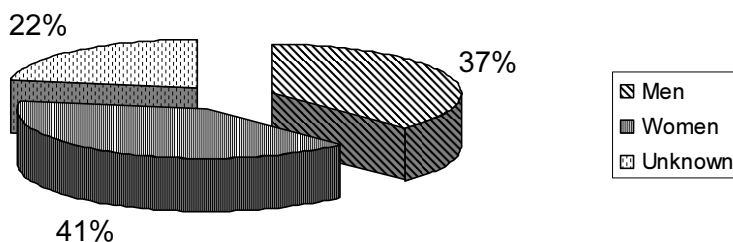


Figure 5.2: Proportion between the genders and children in the skeleton series from Cernavodă-Columbia D.

Concerning the anthropological features of this community, it can be established that the skulls are mostly dolichocranian, for both sexes, at the upper limit of this category. There is slight variation concerning the sex differences. The male individuals have dolichocranian and mesocranian skulls, while the females have also brachyocranian indexes, together with one hyperbrachyocranian and one ultrabrachyocranian individual. The height of the cranial vault is usually large for both sexes, belonging to the high and very high category of skulls. The porio-bregmatic longitudinal and transversal indexes are moderate, namely orthocranian and metriocranian. We have

to stress here that the male skulls belong in 57% to the hipsyrcranian category for the porio-bregmatic longitudinal index, while the female is in a smaller proportion of 22%. The porio-bregmatic transversal index registers lesser cases in the high acrocranian category both for men (39%) and for women (25%). On the occipital bones, a special configuration of the bones can be observed with a very high and curved *squama* and a transversal depression located under the *inion* point. Thus it reveals some analogies with the Osman-kayasi forms, shapes conventionally denominated as “*variant C*”. The stature, calculated according to three classical methods in use (Manouvrier, Bach-Breitinger, Trotter and Glessner) is usually over medium, towards the high end for the male individuals and high for females one.

According to all the information obtained when studying this series, it may be inferred that the population under discussion was a rather polymorphous community. Interestingly, we have found some individuals resembling the Předmost forms who are possible descendants of the Upper Paleolithic and Mesolithic human stages of evolution, as well as those few individuals of the “*variant C*” that point to the Aegean-Anatolian world. These elements demonstrate that we are facing a community that resulted from the mixture of the native stock of population in Dobroudja that preceded the Neolithic, and the new coming east-circummediterranean communities (Necrasov, Cristescu, Maximilian, Nicolăescu-Plopșor, 1959: 106-110; Necrasov, Cristescu, Botezatu, Miu, 1990: 182-185 and Table no. 4).

Regarding this necropolis, a more recent paper (Lazăr, 2012: 405-428) contests the way the archaeologists excavated and interpreted the data. It also referred to the fact that the specialists involved in the anthropological study did not publish an extended analysis of each skeleton which should have been gathered in a monograph and failed to check in detail the osteological materials that might have been wrongly numbered in the field. As the young scientist is not familiar with the period before 1989, we could tell him that in those times, when the anthropological results of the analysis for the Cernavodă necropolis were finished, the restrictions of the communist system existed and no books on this field were published for several decades. This is the reason why no volume of this kind existed and the reason why for the larger skeleton series, no matter of their dating had been published in this “abridged” form. These factors indeed create many difficulties for the present research.

The author of the contribution mentioned that “...the anthropological study didn’t consider the representativeness of the anatomical elements for this anthropological sample and the correlation between them in order to determine the belonging of several dispersed anatomical elements to the same individual in order to avoid the confusion about the MNI” (Lazăr, 2012, 423). As for the exact numbering of the skeletons, as far as we know this is usually the task of the archaeologists, who must keep their evidence and also register them on their plans during the fieldwork. Moreover, the anthropologists who analyzed the skeletons were very good specialists and knew this elementary condition about the isolated bones and their possible belonging to certain

individuals. Yet, on the other hand, they could not compare each single bone or group of bones with the other more than 500 individuals of the respective series to see if any of the skeletons was dispersed into several pieces.

The conclusions of the respective study were based upon the fact that in the repository of the hosting institutions there are fewer numbers of the existing materials today than the amount initially reported by the archaeologists and anthropologists. One of the objective factors that surely influenced the initial condition of the skeletons was that the location of the Section of Anthropology from Iași was changed about five times just in the past 30 years, without any financial support for its safe transportation. The same situation affected the Institute of Archaeology “Vasile Pârvan” from Bucharest that moved twice in the past 30 years. Each displacement of the material caused both large and small damages of the archaeological materials that had to be transported.

Returning to anthropological studies, we go further to Limanu, where we should mention that some special items were used as funerary grave goods, namely a marble vase, 3 arm bracelets of *Spondylus gaederopus* (Schuster 2002: 50, 55), more than 700 tube beads made of *Dentalium*, 3 chisels, one axe and one flint blade. It is interesting to note that one of the bracelets seems to have been worn by a child. Besides, we should also emphasize that the location of the funerary grave goods in the burial is not known, because the necropolis was destroyed (Galbenu, 1970: 77-86). This funerary isolated find of the Hamangia culture was uncovered during rescue excavations carried out at Limanu.

Anthropological data of the child skeleton: The skull of the individual is mesocranian (75.6). The deciduous dentition is represented by i2, c, m1, m2 on the left side of the maxillary and i1, m1, m2, on the right side. There are also some permanent teeth included into the alveoli: M1 (with existing crown) and I.1 right, together with M1 (with shaped crown) on the left side. The mandible has the deciduous teeth represented by m1 and m2 and the permanent ones by M1 with formed crown and included into the alveolus.

The post-cranial skeleton is remarkably well-preserved. Some bones of the limbs are present, excepting the right ulna, the left humerus and radius. The approximate age was to four years (Georgescu 1974: 7-9).

Other funerary finds of the Hamangia Culture in the territory of Romania were done in Mangalia, Irvinezu Mare, Corbu de Jos and Zarguzan (Hașotti 1997, 32). In Bulgaria the necropolis at Durankulak and Varna-*Batareiata* should also be mentioned (Hașotti 1997: 29-32, with older literature).

5.2.2 The Transitional Period to the Bronze Age and the Bronze Age

The first epoch is less known for its funerary finds on the territory of Dobroudja. Well-known manifestations, however, are the Cernavodă III, Cernavodă II, as well as the

tumular ochre burials. For the first two cultures there are no anthropological studies, but it is known that the respective communities used inhumation rites.

5.2.2.1 Cernavodă III

Necropolis: the one discovered in the site from Cernavodă on the “Dealul Sofia”.

Funerary rite: inhumation in flat burials.

Position of the skeletons: flexed, usually on the left side.

Grave goods: missing. Out of that site, 11 skeletons could be anthropologically analyzed,⁷⁸ seven being male and four female. The series has an average cephalic index of mesocranian type, close to the dolichocranian category for men (75.08) and mezocranian for women (77.14). Among these skeletons there is no ultradolichocranian, but also just one hyperdolichocranian and a dolichocranian, the rest of the individuals being mesocranians of all nuances and one individual being brachycranian at the lower limit of this category (80.76). In fact, the specialists who studied these skeletons have emphasized that the afore-mentioned series is less dolichocranic in comparison to all Neo-Eneolithic series, comprising mostly brachycranians. This fact is also specific to the Globular Amphorae Culture in the transitional period from Eneolithic to the Bronze Age. It is interesting to note that the heads tended to become increasingly round here not as much by shortening the anterior-posterior diameter of the skull, in a manner similar to that of other contemporaneous series, but by the increasing of the transversal diameter whose average is higher than that of other Neo-Eneolithic series. By its features, the neurocranium was closer to the Eneolithic series at Cernavodă-Columbia D and Cernica and further removed from the bearers of the tumular ochre burials, who were partly contemporaneous with the Cernavodă III Culture. Yet, some similarities could be detected between the individuals at Cernavodă-Dealul Sofia and the bearers of the tumular ochre burials, especially in regards to facial features, excepting the nose (Necrasov, Kluger, Roșca, 1965: 170-172).

5.2.2.2 The Tumular Burials

Those on the Lower Danube have been separated by Gavrilă Simion into three categories, considering that all burials had used the inhumation rite:

The first category:

- Comprised of the inhumations with supine skeletons, having the head placed with the sight forward or fallen aside, on the left, or on the right, with the arms along the body of the deceased or slightly flexed and having its palms placed on

⁷⁸ In fact, there were 13 skeletons. Two of them had been discovered after 1965, when the first 11 had been published by the anthropologists. Still they remained not anthropologically analyzed. We have all the information from the plans of the excavations in the archive of archaeologist Prof. Dr. Petre Roman whom we are deeply grateful for his valuable help.

the ground. The legs of those individuals were raised up and then allowed to fall, either both on the left or right, or one on each side, creating a rhombus.

- The pits had a step, covered with wooden beams and a vegetal cover plastered with clay taken from lake sediments.
- This type of burial belonged to the last phase of the Usatovo culture.

The second category:

- The pit had an oval shape and a step. The construction system of the pits consisted of positioning beams both in a longitudinal and transversal arrangement, but also involved plastering a vegetal cover with clay taken from lake sediments, similar to the first category of burials. This category is considered to have taken place earlier than the first.
- The mentioned category is interpreted as the result of an interface between the Yamnaya and the Usatovo shepherds.
- The position of the skeletons were flexed on the right. Ochre is also present.
- It seems that these two groups were contemporary and the second one belonged to the classical I period of the Yamnaya culture.

The third group:

- Little mounds were gathered into groups surrounding one of them and finally they all form a bigger tumulus uniting together through a successive addition of earth.
- The pits are large with a step and they are also covered with wooden beams and clay from lake sediments.
- The position of the skeletons are flexed on their left, although there are some that are occasionally placed on their right. One of the arms was placed on the knees or coxal bones of the skeleton while the other one is placed towards the first arm, or chin (Simion, 2003a, 29-30).

We could give here some examples that belong to these kind of interments that are sometimes single and in other examples are put together in the same tumulus. We should point out that most of the skeletons have not been anthropologically studied, but we present them here merely for their interesting funerary rituals.

1. At Sarichioi (Sarichioi comm., Tulcea County) in Mound no. 1, five skeletons were found in rectangular pits, covered with wooden beams.

Funerary rite: inhumation.

Position of the skeletons: the first burial (B.1) contained a supine skeleton, while the other individuals were flexed on the right, or left side.

Grave goods: missing. In the southern part of the excavated mound M.1, five groups of bones were discovered, placed at different depths. Some of them were incomplete skeletons or were groups of bones, without anatomical connection. All of them were assigned to the Bronze Age (Simion, 2003a, 21).

2. Casimcea-an isolated flat (?) inhumation burial was accidentally found. The skeleton was in ill condition. Its skull had a western orientation. There is no data available with regard to the position of the skeleton.

Grave goods: a stone scepter, rendering a horse head, 15 spear points made of flint, three flint blades, five flint axes, one grattoir.

Archaeologist Dorin Popescu, who studied this burial, considers it to belong to the Eneolithic period (Popescu 1941: 85-91). Later on, Eugen Comşa assigned it to the “old period of the Yamnaya Culture” (Comşa 1978: 24).

3. Baia-Hamangia-An inhumation burial was discovered. The position of the skeleton was flexed, on its right side, with its skull to the north. The preliminary anthropological analysis performed at the *Section of Anthropological Studies-Iaşi* by Olga Necrasov pointed out the male features of the individual, and that it belongs in a mature age category. Slight traces of ochre were detected on the bones (Lăzurcă 1977-1978: 10). The burial may be dated back to the transitional period from the Neolithic to the Bronze Age. E. Comşa (1978: 24) considered it to belong to the old period of the Yamnaya culture.

Archaeologist Petre Roman concluded decades ago that the region of Dobroudja was not a well-developed material culture specific to the Bronze Age. Yet recent studies point to the contrary, considering the fact that the tribes that lived in that area were not settled ones (Roman, 2003a, 13-30). In the period that followed after the Neolithic, Doboudja continued to be a passage zone for the different nomadic or semi-nomadic populations.

Tariverde-We have scarce information about a tumular burial, containing remnants of a human individual (bone fragments, teeth) and a “grain” of ochre. This burial is assigned to the late period of the Yamnaya culture (Comşa 1978: 22).

Luncaviţa-Drumul Vacilor-two mounds with 12 burials were investigated. Regarding the interments, it may be observed that for some of them a mound was raised, while others were placed into its mantle. The first group is assigned to the Late Yamnaya and the second to the final part of the Middle Bronze Age.

Specific features (first group): rectangular pits, with rounded corners, the exception being the *Burial no. 5 (cenotaph)* with straight corners. The pits were not covered with wooden beams.

Specific features (second group) the pit was dug into the mantle of the mound and possessed an oval shape; none of the burials of this group contained any grave goods (Vasiliu 1995a: 122-125, 128-131).

Position of the skeletons: these were laid in supine position, with their arms along the body or flexed on their right side. They had their heads to the east or north.

Fl. Burtănescu reluctantly admits that *Burial no. 7* could have belonged to the late Usatovo-Folteşti; it is also possible to add *Burials no. 5* and *6* to this period (*cenotaphs*) while *Burials no. 4* and *8* probably belong to the Early Bronze Age (Burtănescu, 1998a: 182-187).

Anadalkioi-three tumuli, out of which two were excavated, each one containing one skeleton. One individual was supine, while the other one was flexed on its right side. The latter was ill preserved. According to some authors, the cultural assignment is not clear (Nikolova 1999: 59-60) but Eugen Comşa (1978: 25) considers that it belongs to the Coslogeni Culture (Late Bronze Age).

Grave goods: poor (ceramic vessels, adornments made of bronze foil, animal bone or teeth etc.)

Position of the skeletons: all of them were flexed on their left side, with just one of them flexed on its right one (Burial no. 3). The palms were placed in front of the chest, or chin.

Luncavița-Mocuța-a single mound, containing two groups of burials. Those for which the tumulus had been raised (*Burials no. 1, 8 and 15*) and those that had been dug into the mantle of the mound. The "Mocuța" mound was raised with earth taken from the nearby settlements and it contained ceramic fragments, shells, animals or fish bones.

Specific features of the first group: rectangular pits, with slightly rounded corners, covered with wooden beams.

Position of the skeletons: all of them are in a supine position, with their arms along the body.

Grave goods: a stone axe (*Burial no. 8*) a mug, a flint blade (*Burial no. 15*) to the left of the skull.

Specific features of the second group: oval-shaped pits.

Position of the skeletons: flexed on the left side, with their arms sometimes positioned in front of the chest, chin or face, while in other cases the left arm was along the body and the right one in front of the chest.

Grave goods: in *Burial no. 7* a flint blade; in *Burial no. 6* a fragmentary ceramic vase.

The first group belongs to the final part of the transitional period from the Eneolithic to the Bronze Age. The second one is assigned to the end of the Middle Bronze Age, or to the beginning of the Late Bronze Age (Vasiliu 1995b: 94-95, 101-102, 104-105).

Mihai Bravu-three mounds with two groups of burials: those for which the tumuli have been raised and the others that were dug into the mantle of the mounds.

Specific features of the first group: the old one, with rectangular-shaped pits, rounded corners and covered with wooden beams placed along their long axes. Exception: *Burial no. 3* of the *Mound II*, which was instead a rectangular pit surrounded by stones.

Position of the skeletons: they were placed in a supine position, with their arms along the body.

Grave goods: *Burials no. 3 and 4* of the first mound contained a spiral lock ring and *Burial no. 3* also contained 2 flint blades.

Specific features of the second group (*Burials no. 2, 5, 6, 8* of the first mound, *Burial no. 4* of the second mound and *Burial no. 2* of the third mound): oval-shaped pits.

Position of the skeletons: moderately flexed, on their left or right side. With regard to the arms, there are two situations: in the first, the arms are brought in front of the face, while in the second, the arm on the side on which the skeleton laid was along the body, while the other one was in front of the face.

Grave goods: just two burials contained grave goods. *Burial no. 5* of the first mound contained a fragmentary flint blade; *Burial no. 4* of the second mound contained a ceramic vessel.

The first group of burials is assigned to the Late Yamnaya culture; the second group of burials belongs to the final part of the Middle Bronze Age or to the beginning of the Late Bronze Age (Vasiliu 1995d: 148-150, 155-156, 162).

Independența (Murighiol)-1 Tumulus with 13 burials, out of which nine (*no. 2, 5-11*) had incomplete skeletons or had been laid in unusual positions (fig. 1-2). From the latter category of depositions, we could mention:

- Burial no. 5: contained an unusual agglomeration of bones. It was assumed that the individual might have been dismembered.
- Burial no. 6: contained few bones of the limbs and other remains, buried along with a vessel decorated by a cord.
- Burial no. 9: contained the bones of the lower limbs that had been removed from their normal position and been thrown over the chest and pelvis of the individual.

Position of the normally buried skeletons: *Burials no. 12 and 13* indicate the position of the skeletons. They were flexed, with their head to the east. There is also one skeleton (*Burial no. 1*) in a supine position, with its hands along the body.

Grave goods: ceramic vases. Archaeologist Gavrilă Simion has assigned these burials to (1991: 34-36; 1992: 98-99) a new Bronze Age culture in Dobroudja, named Bugeac. In fact, this was a local variant of the Dnestovka culture, that used the older tumuli for their burials. In this instance, the mound that was raised for the central burial was later destroyed by the bearers of the Bugeac culture. Other specific features of these communities may be seen in the use of ochre in its small quantities but also through some aspects of the funerary ritual that resembles those of the Usatovo culture but are dated back to the Bronze Age due to the burials made in older mounds; these consisted of construction that used boulder mantle and stone rings.

This instance is the single presence of such elements south of the Danube; further results have yet to be discovered by future research in that region (Simion, 1991, 33-39).

Fl. Burtănescu considered these burials to be part of the Usatovo culture (Burtănescu, 1998b, 37-56).

Sabangia (Sarichioi comm., Tulcea County).

North-east from “Movila lui Pandrea”, which is a mound with 11 burials assigned to different periods, most of them being from the Bronze Age, Burial no. 5 was found

included in a boulder agglomeration. It contained parts of a human skeleton (Simion, 2003a, 19).

Zebil (Zebil village, Tulcea County).

The mound investigated there contained 15 burials, out of which seven had their own smaller mounds, while the other eight were secondary and were included in the mantle of the final mound that brought together the first group of burials.

In Burial no. 3 it was found a group of bones with an E-W orientation, together with a vessel made of coarse paste, placed 30 cm away, above the skull. Burial 3a contained just 5-6 bones and the skull of the individual, all of which were discovered in the mantle of the mound.

Burials no. 9 and 10, also secondary ones, uncovered in the southern side of the mantle, contained heaps of incomplete human skeletons, without any certain orientation or grave goods. Burial no. 11 also contained few bones, without any grave goods (Simion, 2003a, 21-22).

Peștera (Constanța County).

In tumulus 3 excavated in 2010, during a preventive archaeological investigation, 16 burials with 21 individuals was discovered. Out of these, the main central burial no. 1-2 (because it was initially considered to have contained the mixed remains of just two individuals and there were in fact seven), in addition to those nos. 9-10 have been disturbed either by looters (1-2) or by subsequent anthropic interventions. However, what we wish to mention here is the presence of only a few bones in burials no. 3, 4, 8 and 15, and therefore the incomplete skeletons buried there.

Anthropological data: For the individuals found in burials no. 3, 4 and 8, because of the small number of bones recovered, the sex and age of the skeletons remains unknown. For the skeleton in burial no. 11, it was possible to establish that it belonged to a male individual, aged 18-22 years (Schuster *et al.*, 2010, 23-43, 69).

These are just a few examples of burials selected from the literature, some of them are in keeping with the customary ritual, but most of them are exceptions to the rule. Unfortunately, as we can see, only a few of them have been anthropologically studied.

As time passes the diversity of the funerary rituals in the region of Dobroudja is increasingly apparent through new funerary discoveries. As a result, the discovered situations have become more complicated to decipher. However, Gavrilă Simion points out that such a sudden shift from one ritual to another surely indicates the presence of different groups with distinct customs, even if they are all assigned to the Yamnaya culture (Simion, 2003a), while the accumulation of information will surely ultimately result in a more and more complete interpretation of these funerary finds.

5.2.3 Early Iron Age (Hallstatt Period)

5.2.3.1 Babadag Culture

This is part of the larger cultural complex of funneled ceramics. It evolved during the Early and Middle Hallstatt period.

Funerary rite: regarding the funerary finds, it is possible to assert that they do not fit with the classical customary rituals. Many burials were found inside the settlements, others in the area of the waste deposition, while still others were discovered in a non-inhabited zone (Ailincăi, 2008, 25). If initially such a practice was considered as an exception to the rule, the subsequent excavations have proven that the reverse is true. To add even more substance to the funerary ritual, the purifying fire was used in many burials, either for the pit, for the skeleton, or for the grave goods. In older research some presumed cremations had been also included but they are no longer considered as a part of the recent study as no anthropological analysis had been carried out upon them.

Gabriel Jugănaru has asserted that, in the case of the incomplete skeletons exhumation could also have been practiced. In this case, cadavers were exposed in places especially designated for this purpose. They were left uncovered for some time until the partial decomposition occurred, and are missing some parts because when they were left in the open air those pieces would have been carried away by animals or by other natural factors (Jugănaru, 2005).

In some specific cases, like one find from the Babadag settlement from level Babadag III, a partial cremation could be identified. The individual was put in a pit that still preserved traces of burning on its bottom and walls. Seemingly, the “game” between fired and not fired surface for the deposition of the dead must have had certain significance. How otherwise could we interpret the find from Garvăn-*Mlăjitu* Florilor made in 1992, where a skull without its mandible had been buried on the floor of a dwelling with strong traces of burning, accompanied by a vessel decorated by girdle grouped alveoli, animal bones, ceramic fragments, stones, charcoals, an iron blade (possibly coming from a knife) and a lot of ash. On the other hand, during the archaeological campaign of 1994 another skull without the mandible had been discovered on the floor of an above ground dwelling from the same site, together with ceramic fragments and stones. This time no traces of fire were detected on the floor of the dwelling (Jugănaru, 2005: 34; Ailincăi, 2008a, 14).

These two finds, but also those from Satu Nou-*Valea lui Voicu*, Babadag and Jijila (the last two from defending ditches), are considered to be expressions of the skull cult, practiced in above ground dwellings, or “sacred” places (Jugănaru, 2005: 39; Ailincăi, 2008, 23).

In other situations the ash was put into the pit even if a fire didn't exist there. This must have been a substitute for the purifying fire. This was the case in the find of a female skeleton discovered in the pit. No. 43 from Satu Nou-*Valea lui Voicu* (Constanța County). The individual was flexed facing downwards, placed on a circle-shaped

platform made of stones, together with the afore-mentioned ash, ceramic fragments and animal bones (Irimia, Conovici, 1993: 52-53, 63, 78, 89-94; Jugănaru, 2005: 38; Ailincăi, 2008, 20).

At Niculițel-Cornet (*Tulcea County*), in a truncated pit in profile, the remains of three individuals (one female skeleton of 25-30 years, another one of the same sex of about 14 years and an *infans I*) could be found. On the northern part of this deposition it was possible to observe that the human remains had been covered with ashes and fragmentary pottery (Ailincăi, 2008, 13).

Necropoli: there are no such finds, just isolated, single or multiple burials. As examples, we could give here the single burial from Capidava (Constanța County) (discovered in the Roman tumular necropolis) and two burials found at Izvoarele (Tulcea County) (Ailincăi, 2008a, 15).

It is not possible to list here all the Babadag funerary finds, most of which are spectacular by themselves. Chronologically speaking, the funerary finds covered the entire development of the Babadag culture. Archaeologist Gabriel Jugănaru was able to consider all the human bones that belonged to this material culture and hence was able to distinguish a few modes of treating the dead:

Burials proper, with flexed (Fig. 3) or supine skeletons (i.e. Niculițel-Cornet, pit no. 3, square 46; S.1/1988) (Ailincăi, 2008, 12),

Complexes containing skeletons in anatomical connection (i.e. Garvăn-Mlăjițul Florilor (Jugănaru, 2005: 34; Ailincăi, 2008a, 14), Niculițel-Cornet, pit no. 1/2000 (Jugănaru, 2005: 36; Ailincăi, 2008a, 18\0;

Complexes with incomplete, or chopped skeletons (i.e. Niculițel-Cornet, pit 45, square 8-11, S. IV/1988 (Ailincăi, 2008:12) ; pit 7 S.VII/2000 (Ailincăi, 2008:13);

Collective burials containing both complete and incomplete skeletons (i.e. Niculițel-Cornet, pit. No. 4, square 52, S.1/1988 (Ailincăi, 2008:12), dwelling no. 1 SK/2000 Ailincăi, 2008:13); Orgame-Jurilovca (Tulcea County) (Ailincăi et al., 2003:307-324).

Skull or mandible depositions (i.e. Garvăn-Mlăjițul Florilor, Orgame-skeleton 13 (of 15) (Ailincăi, 2008a: 14, 17). A variant of this practice was found at Satu Nou-Valea lui Voicu, where a pit of the Babadag phases II-III was found with dimensions of 12-13 m x 2-2.20 m containing remains of 11 dogs and pigs, among which two human skulls and one mandible had been mixed (Jugănaru, 2005:37).

Position of the skeletons: variable, some were supine, others were flexed on one side, mostly on the right. In one case, the skeleton had a stone slab placed over its skull (Morintz, Jugănaru 1995: 182; Sîrbu, 1994:88).

Grave goods: broken pottery sometimes mixed with animal bones, stones and other objects.

Below we have offered some more detailed examples of Babadag burials:

Babadag (Tulcea County).

An interesting group of skeletons comes from a “storage pit”, discovered in the eponymous settlement.

That pit is not a single case, as some of the other similar situations that were found, when people were buried in “*storage pits*”. The find from Babadag consisted of a truncated pit in profile, with a circular opening on the ground surface, and its bottom was covered with a black colored substance. Inside it, there were three individuals arranged in a circle. The middle one was placed with the head towards the legs of the others. *Individuals no. 1* and *2* seemed to be somehow isolated from *no. 3*. Near the head of the latter a vessel with black substance had been placed, similar to the one covering the bottom of the pit. The vase is the only grave good that accompanied those three individuals.

Individual no. 1, placed in the middle, was flexed on its left side, having the arms placed nearby the head and the face turned towards the *individual no. 2*. The bones of this skeleton were gracile, with rather strong muscle insertions. It belonged to a woman, aged at 45-50 years, with an over medium height (160 cm-Bach). The skull, slightly put out of shape by the pressure of the soil, was missing parts and was not well preserved. It belonged to the ultrabrachycranian (91.42) orthocranian (74.28) and metriocranian (81.25) categories. The cranial relief was moderately emphasized.

The postcranial skeleton was also gracile, with marked muscle insertions and some missing bones (patellae, carpal and metacarpal bones). The tibiae are mesocnemic (67.85-the right and 65.62-the left), with the marks of the solear muscle is well outlined. The femora are hyperplatimeric, without pilaster.

Individual no. 2 is a female, aged at 24-25 years, with an over medium stature (158 cm-Bach), with a gracile skeleton and moderate developed muscle insertions. Laid in a supine position, it had the skull turned to the right, the right arm being placed towards the head, the left on the abdomen and the legs flexed upwards and fallen aside. The skeleton was well preserved.

The skull with a stressed cryptozgy, is hyperdolichocranian (68.61), acrocranian (99.20), ortocranian (72.92) and hypsicranian (63.53). The cranial relief is moderate.

The femora are hyperplatimeric (66.66-the right and 62.50-the left), with a weak (104.00 the right) and moderate pilaster (116.00-the left).

Individual no. 3 seems to have been given the most care in comparison with the other two. It was not only somehow isolated from the others, but it also had the only grave good (vessel) nearby.

The skeleton belonged to a male individual, aged at 55-60 years, with an under medium height (163 cm-Breitingner). It was laid in a supine position, similar to the one of the *individual no. 2*.

The skull is mesocranian (76.92), acrocranian (102.85) and hypsicranian (79.12). It has phenozygy (92.85). The cranial relief is weak.

The postcranial skeleton is gracile, with strong muscle insertions.

Neither the cause of death for those three individuals, nor the reason for being buried together could be established, as they bore no traces of violence (Perianu, 1993: 163-168).

Niculitel-Cornet-In the pit no. 3 four individuals were discovered (four skulls, upper and lower limbs and parts of the thorax). Still most of the space was occupied by a complete supine skeleton placed upon a bed of ceramic fragments of the Babadag II phase and with its hands on the abdomen (Jugănar, 2005: 36) (Fig. 4).

Orgame (Jurilovca comm., Tulcea County)-in a pit with a depth of 0.80 cm there were the remains of 13 individuals (seven male individuals, four female ones, one adolescent of 17-19 years of unknown age and an *infans* II of about eight years), ceramic fragments of about 80 vessels, several objects made of iron, clay and stones were discovered (Ailincăi, Mirițoiu, Soficaru, 2003: 307-324) (Fig. 5).

Anthropological data: Until now, 48 complexes with human bones belonging to 17 archaeological sites of the Babadag culture were anthropologically studied (Ailincăi, Constantinescu, 2008: 124). If we consider just this category of skeletons, it becomes evident that there are factors that may add further information to archaeological projects. Thus, we could see that regardless of the age category (*infans* I or II), children were usually buried solitarily and as complete individuals. There is, however, an exception at Orgame, where a child of about eight years old had been buried with adults, mature and *senilis* male and female individuals. As well, at Enisala-Palanca, there were three bones of two *infans* I (the femur of an age 5-6 child and the femur and tibia of 0.5-1.5 year child) that was found in the filling of a burial pit where an adult of unknown age and a male of 18-22 years was also discovered (Ailincăi, Constantinescu, 2008: 122).

The women's skeletons, like those belonging to men, were found in three distinct situations: as complete skeletons, as incomplete ones with partial anatomical connection, or as distinct parts (i.e. mostly mandibles and limbs). Moreover, on three female individuals compared to just one male one, traces of violence were found (a female individual aged at about 25 years from the three skulls deposition from Babadag, another such skeleton from pit no. 1/2000 from the same site, about 14 years old-with blow traces on the skull. In the site from Orgame, in a collective pit that contained 13 individuals, a female individual aged about 16 years and one of the adult males bore traces of violence affecting their skull, maxilla and mandible. Another adult of unknown sex in the same location had other traces of violence found on the fibula.

According to the anthropological studies carried out to date, fewer men have been found buried than women. Not all Babadag finds have been analyzed, however, so we consider this situation to be simply a circumstantial one, determined by the stage of the research.

*

In northern Dobroudja other funerary monuments belonging to the Hallstatt period have also been found, but none belonging to the Babadag culture.

Celic Dere-two necropolis, one of them being a tumular one; the other being flat. Both of them were biritual.

Position of the skeletons: These cemeteries comprised a diversity of funerary rituals. Some burials are cremations, with the human remains placed on the bottom of the pit together with a vessel. Some of them were placed in stone boxes or in urns, sometimes with lids. The inhumation burials contained skeletons that were either supine, or flexed, with the arms along the body of the deceased or with their palms on the abdomen. The skeletons were placed on the bottom of the pits. The orientation is SE-NV, S-N or E-V. There were not only some double interments present, there were also some partial ones.

Grave goods: In the inhumation burials there are vessels, adornments and weapons. The latter are to be found near the thigh, while the adornments are placed near the head. In the cremation burials the adornments are situated above the human remains, the harness pieces beside them, while the offering vases are located towards the edge of the pit (Simion 2003a: 237-239).

The necropolis belonged to a population mixture between the local Getic people who practiced cremation and some allochthonous communities, which had cultural analogies in the north-pontic region, or even in Northern Caucasus. In time, they could be dated in three distinct sequences. The first in the 6th century B. C., the second in the 6th-5th centuries B. C. and the third belonging to the Scythians that was dated in the last quarter of the 5th century B. C. Some random finds had existed and were assigned to those latter mentioned communities. By now, however, enough exact and specific elements of dating may be found in certain archaeological contexts in the necropolis from Celic Dere, that was systematically investigated. may be (i.e. akinakes, arrow and spear heads, harness pieces, scepters etc.) (Simion, 2003b: 215).

Anthropological data: The cemetery was composed of two components: one with flat burials and the second with tumular ones. In all, 15 individuals found during the 2003-2004 archaeological campaign have been anthropologically investigated, ten coming from the flat necropolis and five from the tumular one. Two burials (*no.* 2 in the flat necropolis and *no.* 16 in the tumular one) were cremations. We should note here that, out of the ten individuals in the flat necropolis one was an *infans* II, three were adults (one belonging to a man and two of them of unknown sex), and two were mature (one belonging to a man and one to a woman), four were individuals of unknown ages (one of them being a woman with unknown age and the other three individuals with unknown age and sex). In the tumular necropolis there was one adult, two matures, one *senilis* of unknown sex and one individual of an unknown sex and age. The poor quality of this data is due to the fact that the osteological materials of the site were very ill preserved; the cemeteries were located in what is today a forest, where the taphonomic factors exerted a strong influence upon the deterioration of the skeletons.

The necropolis listed above were of a common character, with all age and sex categories being buried there (children, women, men) and were not designated for any specific category like those employed for warriors.

The use of both kinds of funerary rites (inhumation and cremation) indicates the heterogeneous aspect of those cemeteries, containing individuals coming from various communities and distinct funerary customs. It is possible that the fewer numbers of the cremated dead, were assimilated into the mass of those who practiced the inhumation rite (Comşa, 2012: 209-234).

An interesting discovery in 1995-1996 at Celic Dere was carried out by Prof. Ralph Rowlett. For instance, skeleton no. 5 was laid on its left side and was of female sex. When analyzed in the field, it was observed that for this individual some displaced bones existed. These included the mandible that was found under the left scapula of the deceased, as well as a femur head that was close to the left humerus. Even though it was well examined, no traces of excarnation or mutilation could be detected on those bones. The only explanation that could be found for this situation was that the grave was left opened for some days. During this time mammals, like dogs or wild animals, had slightly disturbed the corpse. Evidence to support this was the presence of a *Helix*, land snail that was found under the lower part of the legs of the skeleton. But this demonstrates that the dead must have been watched over. Even if natural agents had intervened, they had been shooed away before they were able to cause further damage to the deceased. A similar situation was present at skeleton no. 1 from tumulus IX-XIII from the same site.

Skeleton no. 2, was quite deteriorated and seems to have been missing the right forearm. Unlike the first skeleton, it was covered with earth relatively soon after death.

The difference in the timing between these burials marked the distinction between the complete and incomplete skeletons in the tumulus necropolis from Celic Dere (Rowlett, 2000: 139-147).

5.3 Conclusions

Dobroudja was permanently a kind of corridor, a space of population movements, beginning with ancient times. This could also offer an explanation for the diversity of funerary rituals encountered even during a specific time sequence. Even if we only take a look at the burial practices used in this region beginning with the Eneolithic time and up to the Hallstatt period, we can easily observe that in the Hamangia culture inhumation alone was practice, while beginning with the Hallstatt period the rite of cremation had also appeared and spread. This is the case even though in the Babadag culture there are just partial cremations discovered. Both rites could be associated with a large number and patterns of ritual contexts. Even so, we cannot exclude the possible practice of cremation as such. We rather explain the absence of examples of such situations by the preliminary stage of the research existing today.

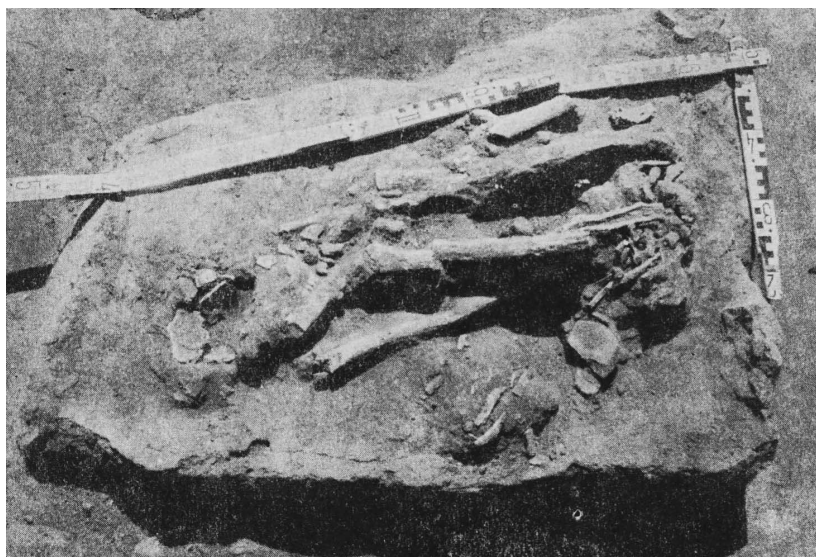


Figure 5.3: Unusual bone agglomeration discovered in burial no. 5 from Independența Murighiol, (Simion, vol. 2, 1991, p. 30).

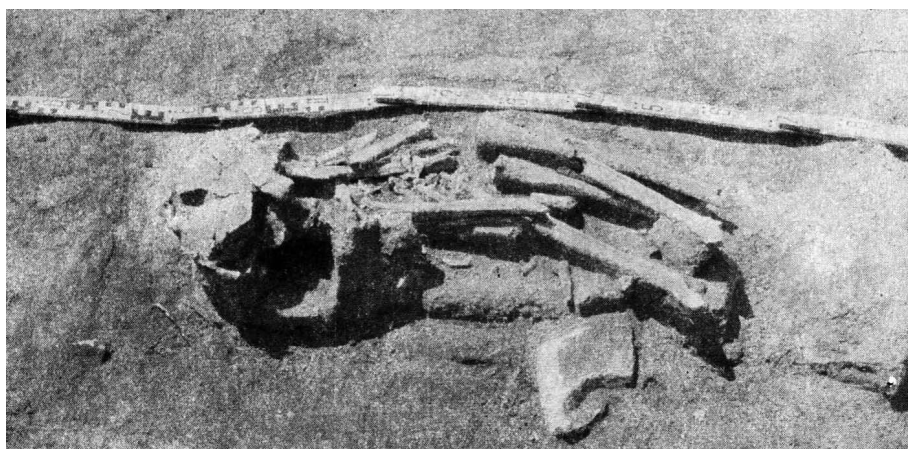


Figure 5.4: Burial no. 9 from Independența Murighiol-The lower limbs placed on the chest and coxal bones of the individual (apud G. Simion, vol. 2, 1991, p. 30, pl. IVg).



Figure 5.5: Burial of the Babadag culture with complete flexed skeleton (Jugănaru, 2005, p.102, Figure 8-1 and p. 33).



Figure 5.6: Collective burial with 5 individuals from pit no. 3-Niculițel-Cornet (Jugănaru, 2005, p.102, Figure 8-7).

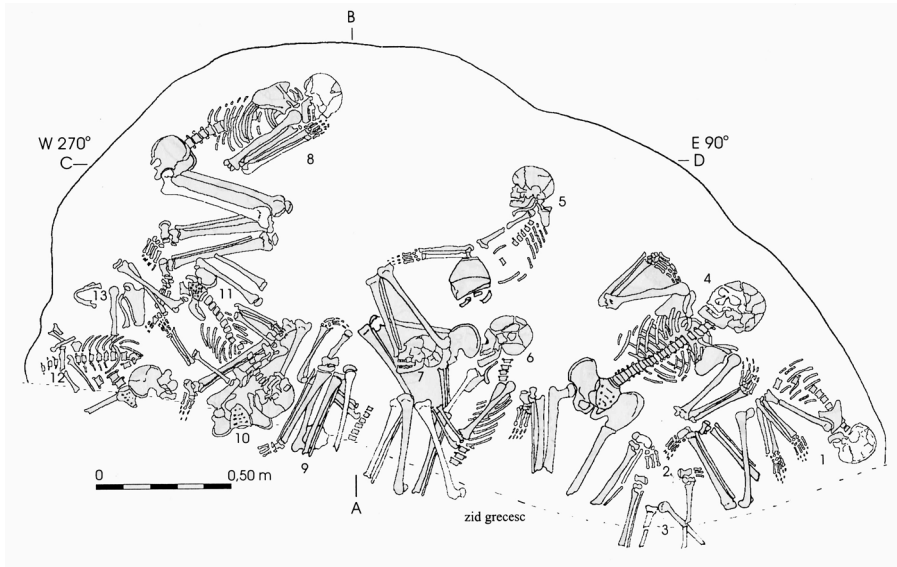


Figure 5.7: Collective burial pit from Orgame-Jurilovca (Ailincăi et al., 2003, 217, Figure 2).

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6 A Copper Age Workshop for Gold at Cheile Turzii, Peștera Ungurească (Turda Canyon, Hungarian Cave), Transylvania

6.1 Location



Figure 6.1: Cheile Turzii, geographical location.

Located in the Petrind Mountains, part of the Trascău Mountains, the Turda canyon is one of the most picturesque natural and archaeological reservations in Transylvania. The Canyon is about 2.4 km long and is cut by the Hășdate rivulet, with a generally small water flow that grows more aggressive in spring after the snowmelt or following heavy rains. The area is full of natural resources some of which were also used by the prehistoric communities that once lived in the vicinity.

Downstream from the canyon, up to about 10 km away (Moldovenеști sau Borzești), on both sides of the Hășdate rivulet a series of rocks and raw materials are present, including onyx, jasper, chalcedony (white, red, smoky), quartz, etc. (Giurcă 1997, 831-832, 835; C.-M. Lazarovici, G. Trnka, Gh. Lazarovici 2004-2006 expeditions).

During our 2004 excavations, on the way to the cave, we discovered several fragments of chalcedony that might have belonged to older structures of the mountain chain where the canyon is located. At the extremities of the canyon we found good quality clay for ceramics, especially upstream, where the main Neolithic settlement was situated; the settlement to which the cave habitation seems to be related.

The Arieș River is located 2-3 km upstream from the canyon. In this area, such as in the village Moldovenеști located 4 km from the spring of the Hășdate rivulet (see Rusu 1977), washing the sand to obtain gold is an ancient occupation and it is an activity that was still common in the last century. Moreover, there are about 120 gold sources in the entire country (Comșa 1974; Rusu 1977); twelve of which are located in the neighborhood of the Turda Canyon, towards the mountains, east and southwards.

The “Hungarian cave” or the “Goats’ cave” is located approximately in the middle of the canyon on the right bank, at the base of an impressive rock wall named the “Hawks’ Wall” about 100 m above the Hășdate rivulet. The cave is approximately 20 m wide and 12-15 m high. The cave goes into the mountain approximately 76 m deep and it has a slightly ascendant slope; some sort of lateral niches are visible in the interior of the cave.

The living conditions in the caves during the year must have been very harsh. Therefore, we believe that the caves were usually inhabited only during the warm season, from spring until autumn. Indeed, most of them indicate only temporary and specialized habitations (such as special places for pottery making, gold workshops, for learning different technologies or cult places for initiations) (Luca et alii 2003; 2005; Ucelli Gnesutta, 1998 etc.).

6.2 Short History

Over the years, the area of the Turda Canyon has been rather well-investigated, as the large number of archaeological points identified in this area demonstrates. Only some of them have been pin-pointed: N. Vlassa located over 42 caves, grottoes and rock shelters; M. Bărbulescu located 28 points and identified another 15 (Rep. Cluj 1992); another 75-80 points have been identified such as new archaeological and ethnoarchaeological discoveries, flint sources, clay sources, megalithic graves, and tumuli (Lazarovici Gh., Kalmar/Maxim 1987-1988, 1987-1988a).

Although the location of the cave has been known since the end of the XIX century (A. Orosz), the more intensive research is due to N. Vlassa (1966-1971) and to Gh. Lazarovici (1991-1994). In 2003-2004 the cave was researched in collaboration

with the University of Venice (P. Biagi, M. Spataro) and we intend to collaborate with the Brukenthal Museum in Sibiu and the State University of San Francisco, USA. The 2003-2004 studies aimed at realizing a clear stratigraphic profile that would allow us to decide upon future investigation methods of the cave. We dug a small surface (aprox. 2 m²) from which all the resulting soil has been washed and filtered/ sifted through very fine screens (1 mm), offering impressive results.

6.3 Stratigraphy

The cave has several habitation levels that have been partially disturbed by later habitations, works in the area done in 1900 and by treasure hunters between 1996-2000. The stratum with deposits was disturbed by several archaeological investigations made by Z. Milea and V. Feneșan from the Museum in Turda in 1976, and N. Vlassa in 1977 and in the centre of the cave, traces of A. Orosz' and D. Berciu's investigations can still be noticed.

In the recently investigated area (approx. 2 m²), the first 35-40 cm are disturbed as follows:

1. Mixed deposits from the Middle and Early Medieval period and Roman period;
2. Sporadic remains from the Bronze Age and Coțofeni Culture.

We also documented the following levels and diagnostic material:

3. Two levels from the horizon with "Pastilatte Handles pottery"/Scheibenhinkel-Late Bodrogkeresztúr approximately 45-65 cm thick, suggesting that there may be over 12 sublevels in the investigated area, indicated by layers of ashes and charcoal. The layers differ in color and structure but they can be detected due to the horizontal preservation in the area of the floor by the large number of pottery and bone fragments, with higher numbers at the edge of the construction. The pottery discovered in these horizons represents about 82% of the entire pottery find;
4. The level corresponding to the Petrești culture includes pottery of this culture and this represents approximately 11.7% of the total pottery. In the recently researched area, part of this horizon had been disturbed by the previously mentioned horizon with "Pastilatte Handles pottery"/Scheibenhinkel-Bodrogkeresztúr.
5. The Middle Neolithic level is approx. 30-35 cm thick, with its depth a bit thinner close to the cave's walls. It belongs to the Cheile Turzii-Lumea Nouă-Iclod cultural group and was partially destroyed by the gold workshop from the horizon with "Pastilatte Handles pottery"/Scheibenhinkel-Bodrogkeresztúr). A rather extended surface settlement belonging to this cultural group was discovered at the edge of the canyon, towards the Petrești village;
6. The Palaeolithic level has not yet been investigated (2004).



Figure 6.2a: Level 1.



Figure 6.2b: Level 2.



Figure 6.2c: Level 2B-CA.

6.4 The Horizon with “Pastilatte Handles Pottery”/Scheibenhenckel-Late Bodrogkeresztúr

Only the materials from this horizon have been thoroughly investigated. We are using this name, *the horizon with “Pastilatte Handles pottery”*, because the names *Sălcuța IV* (which does not represent the fourth level of development of the civilization) or *Herculane-Cheile Turzii* do not seem appropriate to us. It is true that the closest name to it would be *Herculane-Cheile Turzii* but its use would create confusions with the Cheile Turzii Neolithic aspect of the CCTLNI (Lazarovici Gh. 1991). Secondly, the current stratigraphy from the Turda Canyon is not accurate and it does not reflect the complete evolution of this horizon, although we have found that the earliest levels indicate a southern migration, which has not been yet connected to the Sălcuța phenomenon.

As can be noticed from the short presentation of the stratigraphy in the control area investigated in 2003-2004 (approximately 2 m²), the horizon with “*Pastilatte Handles pottery*” was the most consistent one. It had two complexes, a construction (part of the gold workshop) and a hearth towards the western wall with a rich variety of archaeological material (Lazarovici Gh., Meșter, Dascălu 1995).

6.5 The Construction

In the eastern part of our excavation we discovered the ruins of a construction with wooden pillars. The eastern wall was made of woven rods. Since our investigation is not yet complete, we cannot approximate the size and shape of this construction. In the researched area, the eastern edge of the construction is straight. Its floor was built on a pillar structure that may have also included rods. Its eastern part, where the oven was located, consisted of a small wall made of rods, only 30-40 cm high. The wall extended to the height of the oven's mouth. The wall's structure was made of thick pillars, 10-13 cm thick, arranged at approx. 80 cm one from the other. It is possible that the pillars sustained a roof, since from the cave's walls there is water pouring down during the entire year. In the area between the thick pillars, the wall was made of poles stuck vertically into the floor, about 2-3 cm thick; from place to place, there were thicker poles about 5-6 cm thick, placed at approx. 2-4 cm one from the other (Fig. 6.4), which allowed the use of a weaving of rods or tree bark.



Figure 6.3: The floor of the inferior level.



Figure 6.4a: Profile through the oven wall.



Figure 6.4b: The oven hearth with stake holes.

6.6 The Oven

The oven was located on the eastern side of the construction, with the mouth towards it. It was used only during 3-4 stages of the construction, from level 4c to 2b0, some of the levels of the constructions being on top of the oven's hearth. The wall of the construction was not higher than the mouth of the oven, because the rich remains were thrown behind the oven and the wall.

When the oven was built, a ditch was dug in which yellow clay mixed with gravel from the area had been deposited, to make a basis for the hearth. At the base of the hearth there are traces of rods. The hearth was well built and consisted of two pieces of clay plastering. The oven had a hemisphere-like shape, and at the mouth it had a hearth inclined towards the construction (V); on the edge of the cave's interior (N) there was a hole at the level of the hearth, orienting the construction towards the centre of the oven. The air bellows, necessary to keep the fire alive, were probably located in this area. The oven had a central pillar with the profile of an "8". The central pillar separates the oven into two compartments: one was used for filling it with wood, while the other was most likely used for gathering the metal melted in crucibles. The second compartment had a small edge that limited the leakage of the metal and made it possible to place the crucibles. Especially in the second phase, the oven's hearth was carefully arranged. The blowing mouth functioned during both phases and had thin clay plastering in which fragments of charcoal have been also discovered. The oven's vault was destroyed and fell in the oven. The poor firing of the external part of



Figure 6.5: The oven with its central pillar.

the oven prohibited any conclusions about the way the vault was finished. The oven was partially dug into the Petrești stratum, and some Petrești fragments have been found behind the oven.

In order to draw final conclusions regarding both complexes we need to finalize research in the area of the profile and to even extend it.

6.7 The Archaeological Material

A vase made of a black mixture was found on the bottom of the complex at the oldest level 4c. It has a four corners shape, the edges of the rim facing up, on its edges it has alveoli and *pastilatte handles*. It is similar to another vase earlier discovered in the canyon area and attributed to the level Bodrogheresztúr B, but not to its final level. The greatest majority of the discoveries from the Turda Canyon area belong to the early phases of the horizon with *pastilatte handles* pottery. In all the phases/levels there are a lot of pottery fragments with *pastillate handles*, with or without decoration, very rarely with white incisions, as well as a large number of bones, especially those belonging to big cattle and deer.

Beside the pottery we have identified several tools made of flint and obsidian: splints, blades and arrows; a fragment from a copper awl; jewelry pieces, seven gold leafs, a golden plate and beads made of shell, stone and six of gold. Some of the beads, especially the shell ones, were in the process of being worked out, which shows that they were made in that location. Although we took with extreme care in our excavation, most of these objects were discovered after the material was washed and filtered through the screens.

In order to not mix the materials, we have numbered them based on their relative depths, following the layers based on the pottery inclination and not on their respective depths. The habitation levels were at 0.46 m, 0.50 m, 0.56 m, 0.85 m. In the table, it is possible to see the percentages that indicate that the climax of the habitation is at 0.60 m. The best correlation is between the fine and the common/coarse pottery, which confirms the pragmatic character of this community. Based on the colour of the pottery we have observed, it is dynamic in relation to the shades, depths and squares used in its making. The dominant colours are brown and chestnut, representing approximately 80%. In the main square (F6, -0.60 with 15.4%) the main colour is dark brown, approximately 27%.

Based on the table showing the mixture of the clay, we concluded that the dominant pottery are the ones that have crushed fragments in their composition, 56.1%, followed by the one with sand, 23.8%. A study focusing on the evolution of the pottery would be interesting, but the investigated surface is too small for any conclusions.

6.8 The Gold Jewelry

There are seven gold leaves, one gold thin plate and beads made of gold. The seven leaves have the following dimensions: 40 x 12 mm; 15 x 13 mm; 11 x 10 mm; 7 x 5 mm; 17 x 4 mm; 9 x 2 mm; 5 x 5 mm. The edges of some leaves were twisted, suggesting that they may have been adhered to a band of thicker fabric, worn at the neck, on the forehead or maybe on a hat. Another leaf seems to have been applied on a thicker fabric, maybe even on a piece of leather. Another gold leaf looked like it was the end of a leaf or an earring, and may have been part of a necklace, together with the rest of the gold beads, which we believe to have been combined with other stone and shell beads. The intact gold plate (63 x 19 mm), had nine small holes and was discovered at about 3 m from the gold workshop. The holes on its margins suggest that it was applied on a piece of clothing. The piece may come from the area of the second workshop (the workshop located in the western part that was researched in 1994 and disturbed by earlier investigations).

Two of the stone beads are particularly interesting especially because of their very small hole, only 0.5 mm, similar to other gold beads (five of the gold beads have a diameter of 1.5 mm and only one of them is larger with a diameter of 6 x 2 mm). The gold beads are made of thin layers that have been cut in an angle and then joined together; this may be observed in some macro photographs. In some cases the gold beads are so well made that one cannot observe where the layers were joined or they may have even been soldered in the oven.

A large number of small bones from reptiles and mice were discovered after the material was washed and screened; there are also fragments of charcoal, carbonised fragments of plants and bushes, small flint and obsidian pieces and fragments of gold jewelry.

As already mentioned, the 2003-2004 investigations were made in collaboration with Professor Dr. Paolo Biagi from the University of Venice. On that occasion, we collected fragments for various analyses, but up to now the results are not known.

Some parts of the carbonised fragments have been analysed by Beatrice Daisa-Ciută. There were identified from cereals (Cerealia-113 caryopses: *Triticum dicoccum*-36 caryopses; *Triticum monococcum*-nine caryopses; *Panicum miliaceum* (mei)-one carhops), vegetables (*Lens esculenta*-twocotyledon, maybe from the same seed) and fruits (*Cornus mas*-19 whole cores and 29 fragments of core bark; *Prunus avium/Cerasus avium*-three cores: Lazarovici Gh. et alii 2006).

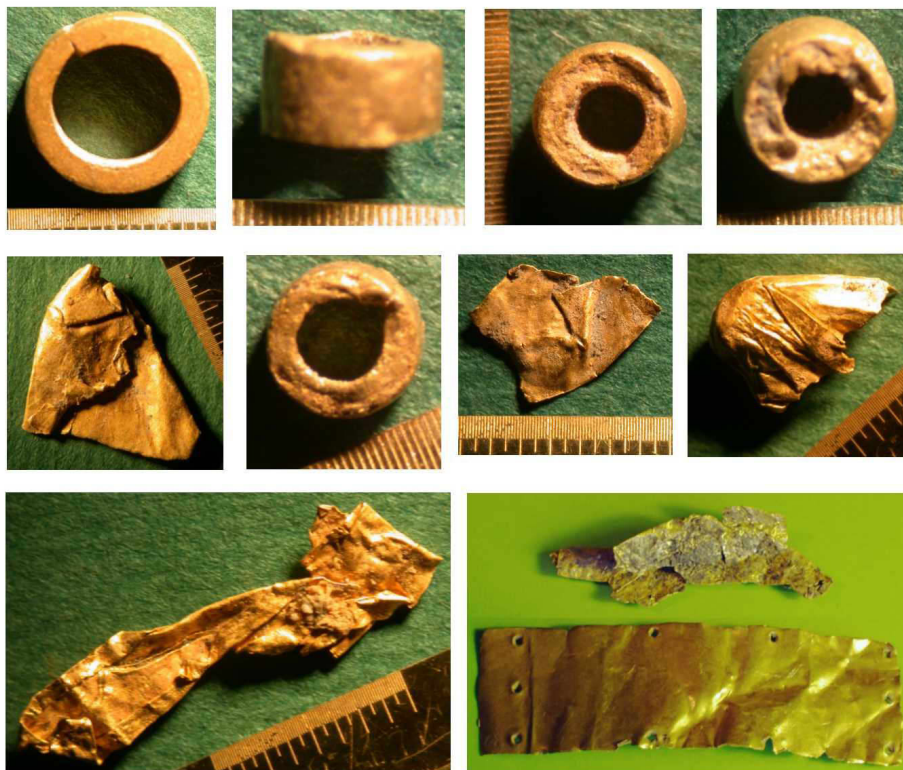


Figure 6.6: Golden pieces from the workshop, different levels.

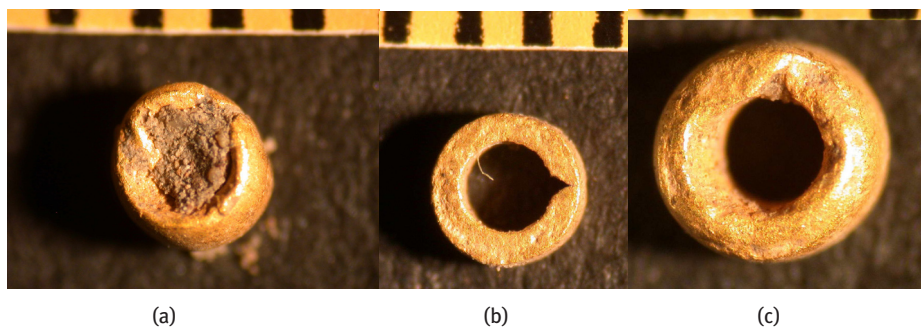


Figure 6.7a-c: Golden beads.

6.9 Conclusions

In the area of the Turda Canyon, the discoveries belonging to the horizon with pastillate handles pottery are particularly rich and plentiful. Similar discoveries are related to N. Vlassa's excavations, as well as to earlier investigations in the following caves: *Ungurească*, *Balica*, *Cetățeaua Mică*, *Cetățeaua Mare*, *Binder*, *Hornarilor*, *Călăștur*, in several other sites *Feldioara-Dealul Cetății*, at *Galații Bistriței*, *Vințu de Jos Dealul Satului*, at *Carei-Bobald VII*; recently a settlement belonging to this horizon is mentioned at *Fundătura* (Lazarovici Gh., Meșter, Dascălu 1995; Maxim 1999; inf. M. Wietenberg, M. Bodea). During the Copper Age, the exploitation and working of gold was a wide-spread activity in Transylvania; there are contemporary horizons at *Ariuşd*, *Bobâlna*, *Moigrad*, *Oradea* and *Târgu Mureș* (Comșa 1974; Lazarovici Gh., Meșter, Dascălu 1995), suggesting its importance. The numerous small gold objects from the "Hungarian Cave", the small beads still under work, the gold leaves and the gold plate, the elements of jewelry, as well as the oven all suggest the existence of a gold workshop in the cave.

Our investigations in this area were aimed at conducting an interdisciplinary research, with a broad scope of investigation. We have collected different data for complex analysis of the *Petrești* pottery and CCTLNI (granulometry, diffraction with X rays, thin sections). We have already established the clay sources, the burning temperatures, the modeling techniques and the polishing ones (Ghergari, Ionescu, Lazăr 2003; M. Spataro also took pottery fragments for analysis).

In order to establish the source of the chalcedony and wood used, we have made several expeditions (C.-M. Lazarovici, G. Trnka, Lazarovici). Our aim was to find out whether the sources from the canyon and from the geologic massive (the *Trascău Mountains*) to which the canyon belongs were used or if were different resources. Our conclusion is that both local sources as well as other ones located in a more vast area were used. The archaeozoologic material is analysed by Diana Bindea (Cluj-Napoca), while the archaeobotanic one by Beatrice Daisa-Ciută (Alba Iulia).

We still need to establish whether the nature of this habitation was seasonal or permanent. The various levels with ashes and charcoal have different colours, shades and thickness and seem to indicate a seasonal habitation at the beginning of the warm season, when the best conditions for washing the gold from the river *Arieș* exist.

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7 Towards the Theory of Social Status: Cultural Parameters of Secure Social Status in Prehistory (a Cross-Disciplinary Approach)

7.1 Setting

Cross-disciplinary studies have become a powerful innovative means to assist the social sciences in the solving of problems that are essential for contemporary society (e.g. Harris, 2002; Earle, 2008). The theory of social status crosses a network of a series of social and related disciplines, although sociology is the field that places the highest priority on this factor. Accordingly, it can be defined as a cross-disciplinary scholarly problem that uses the general framework of sociology but integrates the methods and research achievements of other social fields. The success of the research depends on both of these factors: how the problem will be defined sociologically and which disciplines will be used to decide this problem.

In the sociology of social status there are three main obstructions that require general reconsideration and updates. These are the clarification of the relationship between social position and social status; elaborating a more precise typology of social status; and updating the definition of the relationship between social status and society as it relates to a structure, reproduction, and strategy.

This research addresses all of the problems listed for discussion above by involving the disciplines of archaeology, cultural anthropology, psychology, forensic psychology, genealogy and medical anthropology. These disciplines are those that are professional profiles of the author by education and/or research experience. This research is an example of a successful cross-disciplinary approach to society that will conclude with considerable updates for sociology. This research hopes to address one of the most common criticisms leveled against sociology: that contemporary sociology has a low scientific status (Sociology, online). One of the possible reasons for this reputation is that it is dominated by self-reproduction and poorly replicated sociological research.

The definition of the social status may initially appear to be an unproblematic topic since in most cases it is seen as a dichotomy high to low or achieved versus ascribed social status (see e.g. Social Status, online; Scott & Marshall, 2005: 636). From these perspectives, it is accepted that wealth and prestige (usually interrelated and/or transmissible) define high social status; respectively, those who are less wealthy and of an ordinary social position would possess a low social status. Recently the author has formulated a social status hypothesis that uses a measure of secure and insecure as markers (Nikolova, in print b) to problematizes the social status phenomenon and to better mimic the way in which it manifests in real life. This follows to an

extent in the tradition of Max Weber's understanding of social status as a complex phenomenon (Gidden & Griffiths, 2006: 302-303), although the initial thesis came not out of sociology, but as a result of empirical research conducted of anthropology and sociology in prehistoric human culture. The importance of redrawing the sociological picture of human society as a diachronic and synchronic global model placed on scholarship in early 21st century stimulates further research of the problem from the perspective of a cross-disciplinary methodology. As the research below shows, it was impossible to simply apply current sociological theories to prehistory since none of them were comprehensive enough to explain the cultural process. Therefore, in the process of this research the author had to redefine the topic as that of a general approach to the theory of social status. Based on this redefinition, it was then possible to place the results (secure/unsecure social status) into the wider complex of status themes, classification and typology.

In the context of prehistory, a study of social status is a complicated problem because of the fragmentary and incomplete material cultural record, and not least because of the dearth of written records. Accordingly, hypotheses are formulated based on selected criteria and a combination of their interrelations. Such theories may create strong support or opposition and usually it is evaluated mostly for its core idea and concept. For example, social status is a complex issue with different variations between the extremes of secure and unsecure. As a reflection of contemporary culture, the thesis of a secure/unsecure status has been reshaping prehistorical research because of its specific records and it is more congruent with the concept of prehistoric time (Adam, 1994). This has also been emphasized by the absence of records that exists for prehistorical research regarding the psychology of behavior, especially in relation to the attachment mechanism (Cassidy & Shaver, 1999; Roisman, Padrón, Sroufe, & Egeland, 2002), which plays an important role in creating secure behavior.

In this research, the author attempts to define the key cultural parameters of secure status in prehistory based on data from the prehistoric Balkans. It will be argued that many of cultural tendencies in Balkan prehistory reflect the social strategy of reproduction of secure status of individuals and communities at different scales. This hypothesis continues the efforts to look into prehistory as a social model with parameters comparable with the contemporary world (see e.g. Dickenson & Emler, 1996; Nikolova, 2010a about accumulation of wealth; Chan, 2010).

There has been considerable progress made towards a better understanding of Balkan prehistory during the past few decades. Especially after 1989 (the fall of the Berlin Wall) the interests of scholars have turned towards the preservation of archaeological sites and away from the large area research excavations that, unfortunately, were emblematic of the latter half of the 20th century for some countries and damaged especially badly the cultural heritage of Eastern Europe. Luckily, many authors have been working hard to undertake a safer path of research of Balkan prehistory by utilizing regional syntheses, studying sites or specific themes. The Balkan prehistoric cultures were included in an archaeological synthesis of the

fundamental work by H. Parzinger (1993), although this author unfortunately missed the opportunity to have contributed to this work with a profound critical research of the archaeological excavations and publications.

The basic site that provides the longest chronological prehistoric column in the Balkans is the Karanovo tell (Georgiev, 1972; Hiller & Nikolov, 1997; Hiller, 2005). Other sites that are key records for cultural analyses include: Drama, Varna I cemetery, Ezero tell, Yunatsite tell, Dubene-Sarovka, Krivodol, Vaksevo, Hotnitsa, Telish, Vinča, Ostrovul Corbului, Drăgănești-Olt, Hirșova, etc. Newly researched regions like Teleorman, Romania also provide insights into prehistory from the perspective of contemporary past (Mill, 2011). Many monographs with collected thematic research works have been published in the past two decades that generally assist researchers in their attempts to draw a truthful and rich picture of the prehistoric Balkans or broader regions of Eurasia. However, even many of the most recent works demonstrate that many authors have been missing opportunities to increase the quality of the social scholarly research which would respectively increase the scientific status of social sciences.

Socioarchaeology usually means applying existing social theories to empirical archaeological materials. However, the current state of sociology is in the same location as all of the social disciplines: at the crossroads of general updates and innovative research in the light of the globalization of the humanistic thought and the opportunity to understand society in depth by using better theories and analyses (cp. Sociology, online).

The application of sociology on prehistory usually creates skeptical reflections in its readers since these are usually a mechanical application of a sociological matrix. To leave this historiographic tradition and to join the group of all researchers who believe that we can learn better about past if we construct innovative theories or constructive critical analyses (see e.g. Buchli & Lukas, 2001; Bird & O'Connell, 2006; Fagan, 2006; Bentley, Maschner & Chippindale, 2008), the author chose a research design that integrates sociology, medical anthropology and prehistory. The prehistoric case study examined here is the Balkans, in particular the Yunatsite culture.

7.2 Towards the Sociological Theory of Social Status

7.2.1 Social Position and Social Status

Social status is a theoretical problem that crosses a series of social and related disciplines although its priority is in the field sociology. Traditionally, sociologists still replicate the standard definition of social status understood as the social status-position or role of the individual in the social hierarchical structure. It is understood as a form of social stratification in which social positions are ranked (organized) by “legal, political, and cultural criteria into status groups” (Scott and Marshall, 2005:

635). This specific understanding is critical for anthropologists, since such groups do not exist in real life, but once produced in theory, their existence may become a means for social pressure or reproducing of corruptive privileges. First of all society structures, especially in the contemporary world, are a segment-based construct since professional, kinship or ideological groups for instance, depend on each other and exist based on the mutual respect of each of the others. Hierarchies exist within the segments and in the differences between the segments, but social integrations and interactions also influence the societal process. There have been critical moments in human history when specific groups' understanding of the nature of society became deformed and such moments or periods have been marked by the blood of social conflicts. On the whole, however, human history is not a history of conflicts but of the social evolution of humanity.

In real life, some social groups or individuals may have decision-making positions, but in order to perform their decisions they have to be a member of the team. The formal hierarchical level of a social position does not itself create social status (see also Boehm, 1993). One may have the social position of director, but because of corrupt or immoral behavior actually possesses the status of an amoral and corrupt person in society (and may even end up the prison). In the same manner, being a teacher by profession but working in a factory or as a truck driver does not make you lose the social status of a teacher. The individual does not simply directly practice his/her profession but it influences the rest of his/her life.

It is important also to distinguish between two terms: social position and social status. These are two separate scientific categories, not synonyms, each with their own scientific meaning. Their reflections on social sensibility (Nikolova, 2012) are different. This is revealed clearly in the controversy over the above cited definition of social status; legal criteria do not equal cultural criteria and the legal position does not equal the cultural position. Such division also explains terms like "status position": defined by Max Weber as an "effective claim of social esteem" (after Scott and Marshall, 2005: 635). If status and position were synonyms, Weber's term would not have meaning. Status defined here, would be the state of a certain individual or group at given moment based on the characteristics of legal, political and cultural positions (Figure 7.1). We may say "He has a high position", yet this does not mean unqualifiedly: "He has high status in society" since the person may not have authority. For example, it is well understood that some people who attained high positions through the corrupt systems hold societal positions that they do not desire. Usually such people have spent enormous amounts of time damaging the reputations of people who possess a high status in order to damage their authority and/or to prevent their social growth. Accordingly, social status should be attached to terms like "condition/state" and eventually "role" as a dynamic term, while social position should be considered as a term that is usually applied to social status as an occupation within economic, government, political or ideological segments of society. This difference is extremely important for an accurate analysis of society. This is an essential theoretical update

especially today since people occupy different positions and defining their real status is a complicated research matter. A single, woman who holds the position of director and who has accumulated wealth (Person A) through crime would have unsecure status in society, while a single, woman, employed at a regular level with enough secured funds based on honest work (Person B) possesses a more secure social status and even a higher cultural status from the perspective of a successful reproduction of society. Based on sociology, Person A may identify herself and others may even name her as person with a high status, but this is an example of how social theory does not reveal but rather masks society (see also Craib, 1992). In many cases retrospective analysis shows that those whom the scholars may consider as possessing a lower or even no social status at all, in fact contributed positively and essentially to successful social reproduction. An example of this may be new immigrants in the United States who come from countries dominated by traditional views on family. They bring with them these views and reproduce them through their children, while third or fourth generation Americans for reasons that are as yet not well-researched may often prefer the status of single mothers. However, having a single status is not directly related to having an unsecure status nor does marital status directly translate to a more secure status. Human society has created many ways to ensure that successful social reproduction translates also as successful economic reproduction (see e.g. Clunas, 2004) including even polyandry (Childs, 2003).

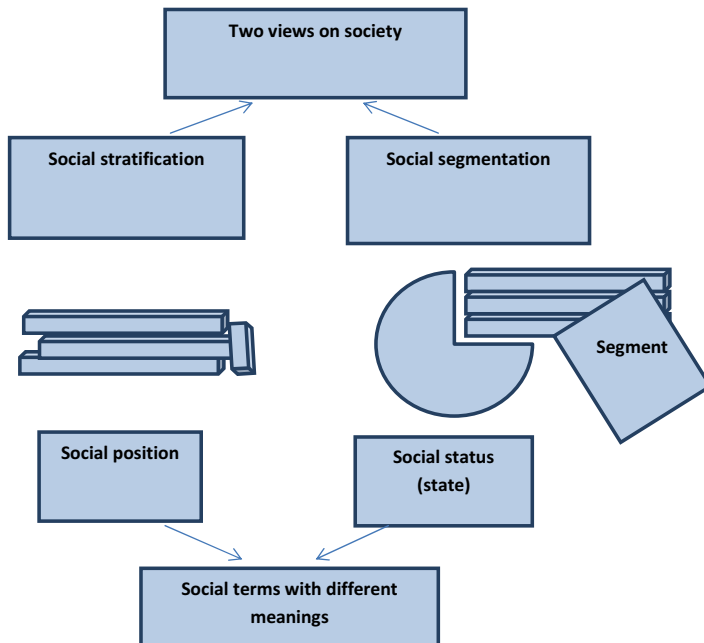


Figure 7.1: Theoretical approach to society: stratification, segmentation, status and position.

Authority is a term related both to status and to social position. It depends on the micro-cultural environment to determine whether people with compromised status have an authority. People with a low social status but who hold high social positions are able to change the whole social environment (using legal and invisible abusive means) in order to achieve a high social status that is represented by prizes, honors, etc. One may have authority without holding a high social position based solely on one's strong positive social practices. Such people enjoy a high cultural status that may help them to achieve high professional social positions as well.

The importance in being precise in definition can be demonstrated by a closer examination of some fundamental theories. For instance, there is an opinion that the history of Western civilization can be conceptualized in terms of a transition from status to contract: that is from a feudal organization of hierarchically organized strata to market relations between individuals who are bound together by contracts (Sir Henry Maine, after Scott and Marshall, 2005: 635). From this point of view, the transition that occurs is from a status to a non-status society is wrong. If in every society there are multiple systems of statuses then, status itself is a positive way to distinguish between people and to create a segmentation and stratification of people. In other words it is a way of structuring people into orders that create meaningful relationships. The fact that the social structure itself has often been misinterpreted in ways that influence the real social life is another question. In some cases skepticism towards social theorists creates a negative state towards the very opportunity society has to be analyzed (respectively) and constructed correctly. An example of this is the emotional question whether society exists at all as a phenomenon (Graeber, 2011).

7.2.2 Formal and Non-formal Social Status

Formal social status is one in which there is a form of certification. For instance, marriage is a typical social formal status. Marriage is not a social position since theoretically it does not make a person gain a specific place in societal stratification. Marriage in the contemporary world can be easily terminated (as one of the sad consequences of emancipation and urbanization in modern society). There is no such thing as a high or low status marriage. Marriage itself is neutral, but is also a means to connect people with a more or less secure social status, with higher or lower position and with accumulated or non-accumulated wealth (see also De Soto, 1992).

An example for high non-formal social status are decision-makers who do not in fact possess high position in society. This non-formal social status is often thought of as an ascribed status-the wife makes decisions at home, but she is just a housekeeper while the man brings the money and has a specific social position in society. This is also very well demonstrated at professional conventions-often people with high social positions do not participate and even try to avoid discussions in public places since they might have attained their positions through connections and are afraid

that discussion and even participation will reveal the truth. People who do not have high positions but have the same professional status may as a result become opinion makers at such places. Such individuals with the potential for a high cultural status may become victims of serious visible and invisible social pressure.

The mobile nature of social status explains many of the problems in contemporary societal practices. The high social position you possess in your company does not grant you with a higher social status within of the national organization of this profession. This is an instance when social position and social status describe two different characteristics of one personality—for example, when one position is as an employed teacher at School A, and the other is as a member of a professional organization (Fig. 7.3).

7.2.3 Social Status is Mobile

Since social status is a state and is not a professional or political position, it can be easily changed. Some institutions have hybrid characteristics—they function as a position but also have characteristics of status. For instance the title, Sir, is a life-long status position (it is not an institution) but in some cases it is also accepted as a social position. Hereditary noble positions are also hybrid—they are attempts to function as a position but with characteristics of a status. If one does not achieve a real position during his/her life, “noble” may become even just a symbol, since many nobles in fact may have lived even at just a subsistence level beyond the inherited property. From social point of view, nobles have been wealthy people who were related through kinship to wealthy people. Influential people were usually those who gained high social positions in society during their lifetime.

7.2.4 Social Status and Social Class

J. H. Goldthorpe (2012) has recently questioned the political correctness of a sociological emphasis on relational and attributional senses of inequality. The author stresses the fact that social status and social class are two different forms of social attribution, although he retains the traditional theoretical level of stratification without using another approach to the societal organization (segmentation, for instance). The word “class” has become popular in the areas of political economy and sociology mostly because of the huge role that this ideological concept played in Marxism. As an ideology, class is used by many authors as a very steady form of social attribution of individuals in that they attempt to replicate opinions that they believe assist in keeping existing hierarchical social stratification. In some studies, class may appear even like a caste system. However, western democracy has developed a strong mechanism of integration of the so-called classes through religious, professional and

even entertainment categories. The general fall in the incomes of the social group with steady examples of accumulated and reproduced wealth (also known as the middle class) generally questions whether society needs a conceptualization of social process based on older traditional terms like class or if it may be better described in new terms that define social clustering as whole, interactive, mutually respected and interdependable clusters. This tendency has been described from slightly different perspectives as an absence of correlation between lifestyle and consumption patterns (1), and working identity and other status group memberships (2) (Giddens & Griffiths, 2006: 309 and cited lit.; Pakulski and Waters, 1996). One of the outcomes is a state of multiple social statuses that characterizes one and the same individual that is known as a social status set (Giddens & Griffiths, 2006: 143).

There is a hierarchy of statuses within every person's social status set. The highest status is the one which is most prestigious. A prostitute's highest status for instance is as a woman that has been considered a high value in every society. The same is valid for slaves-gender is also their highest status. The prisoners keep their highest status-a teacher would have the highest status as a teacher, while a director would lose his position since director itself is a social position but is not a status. In other words, every person has a set of statuses in an hierarchical order and his/her value in society is usually based on the highest status he or she occupies.

For this research, it is important to avoid terms like class and to work instead with terminology that not only better describes the social process, but also does not deform the society as an actively functioning system.

Regarding the themes of secure status and wealth, theoretical frames include the four groups of social differentiation: 1. Social division of subsistence segments / social clusters; 2. Initial wealthy segments/social clusters (who produce wealth but cannot reproduce it); 3. Advanced wealthy segments /social clusters (who produce and reproduced wealth); 4. Super-wealthy segments/social clusters (who produce and enormously reproduce wealth) (Nikolova, 2010a). This classification was elaborated with the field of prehistory as a working hypothesis to explain burial goods in cemeteries, but it can be also expanded as a general social structural hypothesis. The quantity criteria depends on social and cultural contexts.

7.2.5 Segmentation and Stratification, Ordinary and Elite

Last but not least, to better understand society, it is important to update the term stratification and to define its relation to segmentation. Some authors who work on the problems of stratification are confused by the limitations of the stratification theory to explain the societal process in depth. D. B. Grusky has been trying to address this problem in relation to the political system, insisting that it is the government in contemporary societies that directs policies towards "fashioning a stratification system in which individuals acquire resources solely by virtue of their achievements".

In other words, this is what stimulates the development of achieved statuses. The reason for this according to this author is that “ascription of all kinds is usually seen as undesirable or discriminatory” (Grusky, 2001: 6). This style of thinking comes from the matrix of stratification and the presumption that society is society because it produces and reproduces stratification. This is not completely true, however, because in many areas it is skilled multi-generation professionals that provide the best value for society; in this example stratification is a consequence and not a factor. Also, many private companies have developed patterns of involving several generations of owners or specialists without hampering but in fact assisting society in the human progress.

Generally speaking, society as a social system attempts a social balance (in order to function) through segmentation and the integration of the different segments within existing complex stratifications based on mutual respects. Social life is not a vertical ladder for the individual, but it is rather a network that integrates the individual into different subsystems that may or may not offer an opportunity for him/her to achieve progress within a given social system. Social progress can mean attaining a higher social position but it may also materialize just as a high cultural or social status without a visible downward or upward movement.

Beyond avoiding dichotomous thinking (achieved-value, ascribed-problematic), it is essential to attempt to restructure social thinking towards segmentation theory of the social structure of which stratification is just one of the basic components.

The most simplified instance is given in Figure 2A-B. The hierarchy of knowledge, elementary (E)-middle and high school (M/F)-higher education (H) (Fig. 7.2a), in fact does not consider the equal value that all three levels of education have in society. There can be a discussion in which education from the perspective of teachers is more important for society. Sociological research may give priority to even the elementary school where small children create the basic cognitive map of knowledge and the ability to learn, as well as the basic enculturation and socialization matrix. Comparing, for instance, successful candidates for work in high technology usually gives priority to the reputation of the college in the United States, but international competition may create a system wherein it may not be the higher education (H) that is the factor but rather the quality of elementary (E) and middle/high school (M/H) that will determine the success of the individual. In other words, from a societal point of view all three basic levels of education belong to three segments of education (Figure 2B). There would be a different model of social thinking from the perspectives of stratification and segmentation:

1. E, M/H and H as segments within education and hierarchy within the segments.
2. E, M/H and H as hierarchical levels within the education segment.
3. E, M/H and H as segments within education, though as a layer in the social hierarchy, etc.

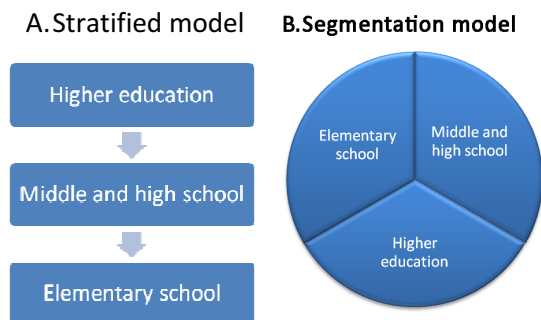


Figure 7.2: Example for stratified (A) and segment-oriented (B) theoretization.

Each model would provide different directions for analysis and conclusions.

When society is thought of as a segment structure (with inner hierarchy), the definition of elite includes status criteria, and not merely social position criteria (cp. Pakulski, 2010; Higley and Pakulski, 2012). Elites would be ordinary people with high cultural statuses: the prisoner who fights for freedom and democracy, and even the exemplary dishwasher who arrives for work every day exactly on time, does his duties perfectly, wears a clean uniform and always has a clean appearance. High social position and wealth do not necessarily mean an elite status in society since not all people of a high social positions and wealth are really the bearers of cultural social progress. "Elite" is a moral category and it is applied to members of society who really contribute to social and cultural progress. Such members do not always have a secure status or high social positions, but they are societal seeds of values that move the spiral of human history upwards. Examples of the typology of statuses (Fig. 7.3) just compliments the thesis of the complexity of the social structure.

7.2.6 Theoretical Synthesis

This research brought out several new social points to be applied to the prehistoric research below: secure and non-secure social statuses, typology of statuses, and a clear differentiation between social stratification and segmentation as a method of scholarly thinking and research, and an updated view on the elite. Although all these points belong to sociological theory, they were born in the course of empirical research and interpretation of prehistory and reflect the influence of an in-depth study of the past on sociological theory from contemporary perspectives. As a facet of cross-disciplinary scholarly research, conclusions from this theory will be further applied to the prehistoric past. This is in hopes that it will offer a more detailed interpretation and will reveal new aspects of this essential period of human history

when foundations of patterns of life, social interrelations and social structures for our contemporary society were built.

7.3 Towards the Cultural Parameters of Secure Social Status in Prehistory

The definition and study of the evolution of social status is a complicated research problem and even requires a kind of oversimplification in order for the researcher to construct a clear model. It is hard to research the problem in the context of prehistoric social evolution alone (see e.g. Ember & Ember, 1995), since it requires more detailed structural components that can be researched in contemporary society and retrospectively contextualized in prehistory.

Since models cannot be replicated and only variants can be documented in archaeological records, it is essential to try to find thematic case studies that may best assist the authors to reveal the skeleton of social status evolution within a research chronological span that stretches between the end of the 7th millennium cal BCE and the end of the 3rd millennium cal BCE (Early Neolithic-the end of Early Bronze Age).

The starting point is the beginning of an intensive sedentization process in the Balkans that began in the Early Neolithic (later 7th millennium cal BCE). Following the archaeological periodization three main cultural spans can be determined: Neolithic (later 7th-6th millennium cal BCE), Copper Age (5th-early 4th millennium cal BCE) and Early Bronze Age (later 4th-3rd millennium cal BCE) (Nikolova, 1999a, 1999b, 2000b, 2008; Nikolova & Görsdorf, 2002; cp. Parzinger, 1993; Görsdorf and Bojadžiev, 1996; Mantu, 1998; Biagi <http://www.lianthropology.org/files/PaoloBiagieta1.twoarticlesrprp6.7.2005.pdf> & Spataro, 2005; Biagi, Shennan, Spataro, 2005, Biagi, P., & Starnini, 2010, etc.).

Because there is a huge number of combinations of the different components of a social status (Figure 7.3), it is difficult to develop a universal typology that would work for all epochs, including prehistory. Then, we can propose two main new types: secure social status and non-secure social status (Nikolova, in print c).

For instance, a single female, with three jobs and without criminal behavior would represent a person of a secure social status that could exist even within a range of below subsistence, subsistence, accumulating wealthy or wealthy economic status. Secure and non-secure social status requires research, while other types of social statuses like gender, for instance, have asserted character.

Non-secure social status would be a status of all people at a level of risk including below the poverty line, criminals, those who are dangerously corrupted but are only publically punished because of the weakness of the law, etc. Secure social status would include all people who are at a steady subsistence level, moral, lawful and who offer positive achievements in society.

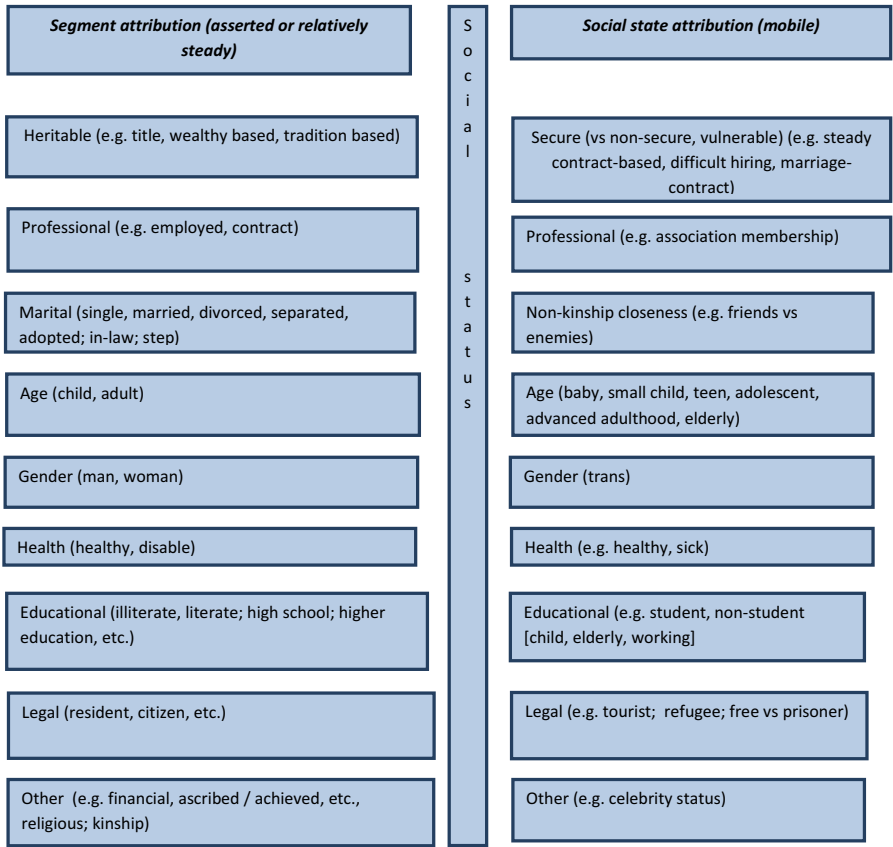


Figure 7.3: An example of a tree of social status types.

Difference levels can be distinguished on the scale of social status: high, marginal, low and very low (Fig. 7.4) (Nikolova, in print c). Accordingly, a very low secure social status would most often be similar or identical with very low non-secure social status. The key criterion is wealth; wealth in this case is understood not only as material wealth, but also as symbolic wealth (enculturation, education, behavior, achievements, etc.).

Regarding prehistory, five basic criteria can be proposed for social status research: age, gender, health, wealth (material and symbolic), and place in context. Beyond cemetery data, houses, settlements and regions provide evidence about general social standards of the buried population.

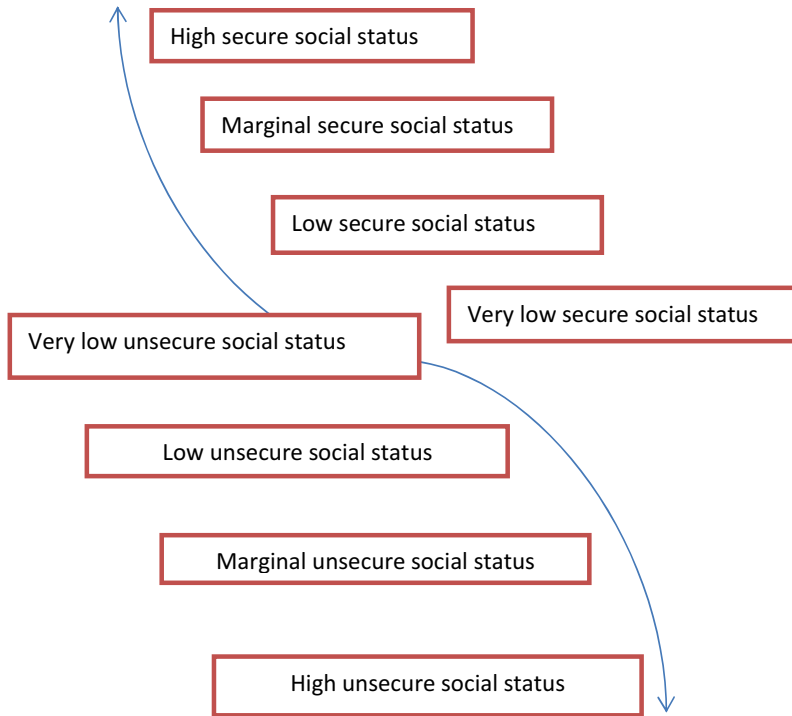


Figure 7.4: A graphic presentation of the secure and insecure social status with different scales of security/insecurity. The criteria for the different categories would depend on the case studies. Very low secure or very low insecure social statuses would depend on the role of the selected important criteria for classification. For instance, consecutive years of cold weather may place some households in prehistory in a position of low secure, while other in low insecure. The families whose main income came from agriculture would fall in the latter category, while the family with existed other means for subsistence would probably stay at the level of low secure social status.

7.3.1 Houses and Secure Status

Houses developed as a main form of wealth during the Neolithic. It has retained this status even through the present. Archaeological records help us to learn about the sizes of the houses and manner of building, as well as some interior peculiarities (see e.g. Cutting, 2007). Contemporary records, however show that from different perspectives the same house may appear to have a different level of wealth. With this in mind neither the size nor the archaeologically analyzed interior can be accepted as non-ambiguous records about wealth. The size may relate to the population number in the house, for instance. Also, it is unclear how each house related to the rest of

the village and whether it was private or a community property. Usually, since there are differences between the plans of consecutive villages, then rebuilding the villages may also indicate a re-arrangement of the accumulated wealth of the residents. Most probably there was a sort of social privilege associated with living on the tell instead on a farm related to a secure status.

The tell continued to exist as a typical model of life in Thrace during the Early Bronze Age with two main forms—low tells and large tells. These multilayered settlements document a steady organized village life that infers the tell as a type of living that belonged within the cultural parameters of a secure status. In other words, the tradition and style of this kind of living demonstrated that the people who lived as a community had many more benefits when they are anchored to the social memory of their ancestors. However, there is no reason to believe that the villagers felt an obligation to live on the tell just because their ancestors had done so. Prehistory provides examples for complex interactions between human culture and nature (Brück, 2001). Even more, the theory of the cyclical destruction-construction of the tells proposed by D. Gheorghiu in this volume, that requires most serious attention, can be interpreted also as a theory of discontinuity with cultural memory, since fire itself may have been symbolic of the end of a specific cycle, while the next inception of the village life might have been connected to completely new kind of social life. Accordingly, the archaeological record is ambiguous and is accepted that there are a variety of symbolic interpretations of settlement life on the tell.

This ambiguity can be theoretically applied to security as a function of the tells that would contrast with the conclusion made based on the fact of the popularity of the tell as a mode of life. The Yunatsite Late/Final Copper village and the fire that caused the death of people on the tell is one positive argument for the insecurity of the social life on the tell, at least at certain periods of Balkan prehistory and/or in certain regions. There is an interpretative analysis of the inhumations at Russe tell (Chernakov, 2010), that may also conclude that tells were not always a secure place to live. However, these case studies are more the exception than the rule and serve only to support generally the ideal of the multi-semantic character of archaeological records in general.

Another direction of comparison is between large and low tells: for example, Yunatsite and Dubene-Sarovka (Nikolova, 2000b, 2002, 2005-2006; Yunatsite 2007). According to the ceramic material and radiocarbon data, it is possible the village of Dubene-Sarovka was founded before Yunatsite. However, the thickness of the total cultural layer is considerably less of the former although there are no visible traces of chronological hiatus during Early Bronze I-II. The village layers are also much thinner than those of Yunatsite that indicate less of an accumulation of material culture and fewer numbers of solid equipment and possibly even fewer houses. In the past, Bulgarian archaeology mechanically accepted the most simplified model of the explanation of the difference in the thickness of the cultural layers; this is the model that assumes periodical hiatuses as almost the only interpretation of archaeological

situations. The use of a false model when applied to any case study serves to subsequently create another false theory; that is the theory of the accumulation of the cultural layer as a chronological indicator (Bojadziev, 1995). In fact, the accumulation of the cultural layers depends on complex of factors including the demography of the population. In the Dubene-Sarovka case it is possible to propose for that the community was in fact semi-pastoral so the village was only occupied by the entire population during the winter. According to this hypothesis, while from spring to fall there lived possibly only the elderly people, small children and other specific segments of society (pregnant women, mothers with more children, etc.) (see also Weiner, 1976). This semi-pastoral community theory is supported by the whole landscape of Upper Stryama valley (narrow river valley surrounded by mountains with excellent pasture), as well as in the whole prehistory in this region-all tells are flat low tells (e.g. Banya and Dubene-Ploskata mogila) (Nikolova, 2000b).

7.3.2 Burials in Settlements as Accumulation of Wealth

Neolithic in the Balkans represents a vast picture of the development of the concept of wealth and ways of accumulating of wealth. The steady development of tells reveals that community units represented models of a successful social reproduction (Karanovo, Kazanluk, Dubene-Pishtikova Mogila in Thrace, etc.). The variety of the lifestyles of the different households on the tell as a whole village reflect a common cross-cultural ideology of community security. The burials on tells (individuals under house floors, or beside a house, or in groups in a special place in the village) indicate a possible desire to keep ancestors as part of an actual social memory related to the village history. They themselves became a kind of social wealth and a component of a secure status. Obviously not everybody was allowed to bury their relatives on the tell (because of the limited number of the graves). From this fact we can presume there existed social differences and thereby connect the burials with an attempt to reproduce a secure social status through successful social reproduction. If we consider the pain felt from the loss of a close relative, and the nearly universal desire to keep the remains of the deceased close to home, the paucity of burials in Balkan Neolithic (and its decreasing as pattern in Copper Age) refers to a very strong ideology and belief system that was able to transform this painful emotion into the meaningful social practices of a successful social reproduction (either no burial or cemetery for majority). For this reason, interpreting village burials as a kind of accumulation of wealth towards a more secure status appears reasonable and corresponds to understanding the prestige of the social status. In both interpretations-burials as wealth and as a means of social reproduction (Nikolova, 2004a)-the focus is on the relation between the body of the deceased and related to this body; that is, the live relatives or more generally members of the community. Such ritual practices like burials in settlements can also be interpreted as a mechanism of increasing the secure status of households within a

given community and may be interpreted as being an aspect of a doctrine of successful social reproduction (see also Chapman, 1955; Chan, 2010; Chaney, 2002).

The case study of the Varna cemetery poses generally the problem of social place in context as an important indicator of social status—from the position of the graves (in a village, in a tumulus, in a specific place in the cemetery) and their location within a given complex, (to the position of the house, village or the fortress). There are stages of social evolution, respective to the development of the idea of place as a social marker. The construction of the grave, “the labor expenditure” (Kaiser, 2010: 109) or the position of a buried individual could be as important an indicator as the health status and eventual inventory for the determination of his/her social status.

7.3.3 Prehistoric Figurines and Secure Status

It is essential to raise the question whether some popular artifacts, like prehistoric figurines, had the function of increasing the level of the secure status of individuals and community and, if so, which semiotic aspects of the figurines created this function. The type of pregnant woman might have been a possible artistic manner to secure pregnancy or eventually to increase the social status of the pregnant woman through ritualistic practices (cp. Gimbutas, 1991). Since society was considered to be a part of nature and there was no clear dichotomy in the way society-nature interrelation has been accepted in later periods, a duplication of the pregnant woman symbol—as well as a pregnant nature (respectively Mother-Earth) seems logical. Pregnancy guaranteed successful biological reproduction of community and this was considered to be a very important moment in the individual life span of the woman. Such an interpretation that places the prehistoric figurines in the field of social and not religious symbols probably brings us closer to the core of prehistory as an epoch (cp. Hansen, 2007). In similar sense G. Dimitriades uses the concept of the “ideological evolution of the human body” (2006). For reasons that are unclear, all symbols of prehistoric culture have been assumed to be related either to mythology or to religion. However, both relate to supernatural beliefs that are secondary in relation to society. In our contemporary society the suit is a symbol of formality, jeans—of our daily busy lives, national flag—of patriotism and/or patriotic festivity. In such a way it can be proposed for prehistory that there were social symbols related to daily life, as well as to social status. Culture has an ability to create patterns (Benedict, 2005; see also Foucault, 1972; Bourdieu, 1992), and where there is a pattern and repetition, material objects easily begin to function as symbols.

Since material culture has an ability comparable to a multilanguage interpreter, when we place figurines like those mentioned above into a social context of stimulating successful biological reproduction, it would increase the scale of the secure status of the pregnant women or the whole social unit related to the pregnant women. If you place them in ritualistic cultural contexts, they could serve perhaps to stimulate

the social memory of myths of genesis, world structure, nature's seasons, etc. The polysemantic nature of the material symbols itself is a factor of the highly secure status of the symbols themselves in society—from the beginning of human culture until today. Respectively, this valuable function was used in prehistory for securing the status of people/society as well (see also Durkheim, 1964; Bradley, 2005).

7.3.4 Metal and Accumulation of Wealth

The emergence of copper in Eurasia was one of the most stimulating inventions for the evolution of the concept of wealth and its social position in human history. The metal stabilized society, and this stability respectively increased the security of society. The Balkans are among the most developed prehistoric centers of copper and bronze metallurgy (see e.g. Branigan, 1974; Chernykh, 1978; Gogaltan, 1999; Işin, 2002; Dergachov, 2002; Antonović, 2006; cp. Govedarica, 2011). A blooming Early and Copper Age culture indicates a stage of development in which probably every family had the agenda of wealth accumulation. The relationships between individuals, families and communities were realized through the communication of a patterned material culture whose semiotic status is very difficult to recognize. Beyond the Great Goddess, Mother Goddess, Earth Mother and other narrative hypotheses, at the everyday level, the secure status depended probably not only on wealth but on community relationships (see also Bauman, 1992). The popular prehistoric figurines were only one of the symbolic integrative components to increase the stability and security of the community connecting the world of ancestors (social memory) with the real life (rituals) and the world of the divine (mythology). Copper Age is exactly the epoch in which symbolic communication and symbolic art had very high role in the reproduction of a secure status. Aesthetics were embedded in a strong social agenda for success that prevented individualized expressions. Mobile and design art existed as patterns that changed gradually or were replicated as tradition. Usually art is a diagnostic for high living standards; if this holds true, the Copper Age is probably the first epoch in human history in which art, wealth and secure status were integrated as interdependent components of social strategies.

Analyzing art as a component of social status and wealth puts the author in a position to draw on an hypothesis that is difficult to support without relying somewhat on ambiguous arguments. First, art as a component of social status may be diachronically connected with the Neolithic and Copper Age. In this case art appears as a cultural component of early sedentary cultures that continued in the Copper Age complimented by metal distribution. Both epochs include prehistoric figurines as well. Eating from a plate with specific decorations was an act of connection with the culture of the whole community. While cultures today are strongly individualized and households have different styles of dishes, in prehistory ceramic dishes were a very active symbolic component of connecting people and community and, respectively of

dividing people and communities. Two neighboring cultures like Gradeshnitsa and Vinča or Boian and Vinča had similar subsistence standards although their artistic cultures described on the map cultural borders which were borders of existent groups with distinct social identities. While today globalization breaks the parameters of national social identities and stimulates universal patterns, in prehistory, even though it was considered to be a global culture without political borders, the interconnection that existed between different regions did not break the regional (local) patterns.

7.3.5 Sedentarization and Mobility, and Secure Status

As Iron Gates Mesolithic shows, generally sedentarization was a step in the evolution of the concept of security and development of a central location of a site that was not based on a secure mode of living (for instance, caves). Using the example from a student of the author's first exam in archaeology, the caves were not always secure and even wild animals would make people leave them forever. Whereas building a completely artificial habitation place and living there for a long period by accumulating a tell type created one of the optimal secure models (see below).

Sedentarization stimulated the development of the family as the elementary social unit within individual households. Having in mind the contemporary world (Blanton, 1994), the family has been from the beginning one of the most optimal forms of obtaining and reproducing secure status.

There are many other consequences of sedentarization that were factors that increased a secure status-raising more children, steady sources of food, stable social relationships, etc.

Two main aspects of living on a tell also increased a secure status: the community with steady strategies for successful social reproduction and a landscape with the preconditions for a good subsistence level and for the accumulation of wealth. The semi-mobile life reflected in the thin-layer villages may have had different parameters of secure status-e.g. mobility as a successful means of social reproduction and accumulation of wealth, or the landscape as a means only of temporary exploitation for subsistence, etc. (see also Breen, 2004).

The Early Bronze Age provides excellent models of development strategies used to increase the secure status of individuals and communities. This is the period when the co-existence of two cultural types was embedded very strongly in the Balkans-sedentary and pastoral styles of living. Since these types co-existed in different regions in the Balkans, it can be accepted as a social pattern and not just as an economic mode for subsistence and, it may be argued, subsistence reproduction and respectively an accumulation of wealth.

7.3.6 Wealth and Secure Status

It may be generally accepted that wealth is the main factor for increasing one's social status; the richer you are, the higher status you have. In archaeology such a statement is supported by conclusions of a high social status based on rich burial goods. The authors formulated a hypothesis of the complex interrelation between burial goods and social status according to which burial goods do not actually show the real social status of all buried population (Nikolova, 2010a). Also, it supported an hypothesis formulated on the basis of a secure social status in contrast to the direct relation between rich and high social statuses.

In this work we developed both hypotheses by problematizing how wealth relates to secure status.

The Neolithic created the model of house as the wealth possibly of one household. This model continues even today and was steadily reproduced also in Balkan prehistory over vast territories, although mobility and a semi-pastoral style of life characterize vast territories in some periods (e.g. Final Copper Age).

Houses were anchored to the place since in the Balkans during Neolithic, Copper and Early Bronze Age tells with cycles of destruction of houses were popular and were even the dominant type in some micro regions. According to this evidence, the house was accepted as a specific kind of wealth that could be renewed (re-accumulated), probably by going through a specific ritual cycle.

In the hierarchy of secure status, access to the land for agriculture and therefore for subsistence probably holds second place, together with domesticated animals that belonged to different households. Unfortunately, the study of the prehistoric animals is usually typological (Bökönyi, 1974) and rarely contextual (Russell, 2012). However, it would-be over-speculative to debate whether the land belonged to individual households or to community, or to both. It is easier to accept that domestic animals were household property, while regarding the land we must conclude simply that it was either household or community property.

Wealth is a dynamic concept with multilayered meanings (Nikolova, 2010a). The core of the concept is material wealth, although health is also wealth and knowledge is also wealth. Health and knowledge can turn at some point into material wealth just as material wealth may also be lost because of the absence of health and knowledge.

From prehistoric perspectives, the accumulation of wealth was a household task since the early stages of prehistoric development. Attempting to accumulate wealth created social differentiation, violence culture, the concepts of morality, of crime, etc.

Including wealth as a criterion of social status creates problems at the level of interpreting a small body of data since neither burials nor settlements provide consistently direct evidence of a wealthy population.

A very important segment of wealth is the symbolic capital and investment that includes beliefs, traditions, power, genealogical connections, etc. Hereditary status, for instance is part of symbolic wealth with a variety of positions at the scale of material wealth-from zero to the highest material richness.

Some beliefs may reserve the highest social status for people who even possess psychopathological characteristics, or ascribe it to those with the natural ability to use human energy for curing. The opposite would be inflicting punishment for using human energy for violence (e.g. witches, or Baba Yaga type from the tales).

Part of wealth is the material culture that specifies different cultural traditions. It is possible that the increasing individualization of the human faces (Burdo, 2010) in the prehistoric figurines from the Western Pontic region relates to a general increasing of the variability of the standards for secure social status. It is possible to believe that the material culture had an active role in the dynamic process of the socialization of prehistoric communities that included obtaining a more secure social status. The role of prehistoric miniature figurines as a status object is very clearly demonstrated in their function as burial goods in the area of Late Tripoli (Usatovo) culture (see e.g. Dergachov & Manzura, 1991: Ris. 8, 10, 12, 15, 16, 18 etc.). It can also be applied to the characteristics of the status spillover (Fisher & Shapiro, 2006) to the status material culture that explains the opportunity the prehistoric figurines had to become so popular in the Balkans (in comparison to other regions). They were so strongly attached to social identity that increasing their popularity was itself a social marker of a higher secure status.

According to Bailey (2005: 186), “any attempt to read Neolithic identities from Neolithic figurines is precarious at best”. However, many of Vinča figurines, as well as of Hamangia (Berciu, 1961, 1966; Bailey, 2005), Gradeshnitsa, Krivodol (Nikolov, 1974), Cucuteni (Mantu, 1998) and other Balkan prehistoric cultures are exactly oriented towards social identity and are most probably emblems of social identity. The identity meaning of Balkan prehistoric figurines is well demonstrated in their common diachronically repeated style, in their posture, and their femaleness as a leading sign of social identity in prehistory (see e.g. Comşa, 2005). There are cross-regional types of figurines that need a contextual analysis for identity research, but not all possess invisible or contextual identity meanings.

There are also continued attempts to deconstruct the prehistoric material culture within imaginary schemes such as patron-client relationships at Varna cemetery (Chapman, Higham, Slavchev, Gaydarska & Honch, 2006: 165, 173-175), in the attempt to compliment Bailey’s imaginary “group solidarity”. As it is well known, Varna I cemetery is only partially excavated and unpublished, so there are missing scientific records about its origin. Most importantly, the flat cemetery is a tradition in Balkan prehistory since the Late Neolithic and there is no reason not to include Varna cemetery in the system of the Copper Age burial customs of the Eastern Balkans. “Group solidarity” is an old concept (see e.g. Hetcher, 1987), although the Copper Age is a period of well-documented social segmentation and the cemetery was not a place of solidarity, but had social norms of cohesion (interconnection, unity) that were followed by the residents and who were most probably under the threat of punishment if these norms were broken.

Pottery creates lines of more intensive interactions in prehistory. It is well documented even in the earliest written records from the Balkans dated probably from the later Bronze Age when Thracian appeared because of the unification of pottery over large areas; because of this there are numerous tribes that cannot be directly matched with a pottery style. The situation is the same in the Later Copper Age—two big complexes that existed in the Eastern and Central Western Balkans show intensive interactions and a unification of the pottery styles probably of numerous smaller tribe communities. In this case, pottery did not create identity, but quite the opposite: pottery became a way for identities interact with one other and served to globalize the cultural context of human interrelations. In addition, the rich graves at Varna cemetery may have had community significance or may have belonged to certain households (although we are still missing a full publication on this topic for more detailed analysis). Our past presumption was that such a concentration of gold may have marked a critical moment of community life and would have been a way to resolve social problems by treasuring wealth in the Mother-Earth. In this case, gold was not a means to integrate society, but it was used to resolve problems of eventual social conflicts. This hypothesis might have found a new supports in the Dubene-Balinov Gorun cemetery. Although it is missing documentation to prove that the gold jewelry was excavated and not just submitted to archaeologists by local discoverers, it is possible that the treasuring of the wealth marks a similar critical moment in the community of Dubene-Sarovka village when wealth became a problem and from the private ownership of a wealthy family it became a sacrifice-gift to the Mother-Earth.

On the whole, the prehistoric grave itself is not a book to read about prehistoric social relationships. It is a cultural complex with multiple meanings and multiple interpretations. The symbolic grave might be a sacrifice, a symbolic burial of a lost family member who was away, an anniversary festivity, a ritual pit, a gift to the Mother-Earth, etc. It seems that Varna had a core area with rich burials that may have related to certain feasts of households or small communities. However, the treasuring of wealth would also have had many meanings. The numerous crossing of meanings serves to provide a whole new line of possible interpretations.

The variety of grave goods relates directly to the question of secure social status. Although it is accepted that all grave goods were places for “other worlds”, it is possible that the material culture may have complimented the grave as a sign of higher secure status. It adds one more layer to the ambiguity of the interpretation of the grave. Wealthy people with a high secure status may not need rich finds, while a wealthy person with a lower security social status might have tried to increase his/her security through valuable material objects.

Real social status is a mobile category because of the dynamic nature of social status components, and the variety of the combinations of the different criteria.

As a rule, for instance, a rich child's grave does not directly translate into a high material social status, because the wealth in the child's grave may be a result of the respect to the place in life and relation of the others to this sensitive human category.

Sick children buried in a rich grave may indicate seasonal malnutrition, and in this case, disease would also not be a direct indication of a lower social status (see also Barnes, 2005; Grmek, 1998).

Placing a deceased person in a village burial may indicate a high social status. For instance, two burials next to each other were discovered at the Yunatsite tell from the earliest Early bronze village. They may be interpreted eventually as a family of possible high status related to the founding of the village. This interpretation would be based on the place as a status criterion and the context-the first Bronze Age village on the tell. One more factor is strong for such interpretation-the long period of pastoral development of the South Balkans (Arnold & Greenfield, online) and sedentarization as an innovative strategy in later 4th millennium cal BCE that required a series of rituals to be codified and to become a pattern.

Mortality is a complex problem of medical anthropology. Prehistoric archaeological records are limited and ambiguous and this results in multiple interpretations and does not always lead to satisfying conclusions.

Ethnographic records point to the fact that traditional societies had not developed ideas about the grave as a sacred place for every member of communities and they did not even think that everybody desired to have a grave. O. F. Raum wrote about Zulu (1973: 163) that certain persons are “not even buried in graves; they are given over to the elements, rivers or swamp, or thrown to animals, hyena or crocodile”

The transition from sedentary to mobile life and from mobile to sedentary life was a dynamic strategy for the most successful social reproduction. In this social process people with influence over the formation of public opinion were of special value and were probably considered the people with the highest social status. It is possible that in such a critical moment the wealthiest people may have even prevented the innovations out of concern for their wealth. If we look at Balkan prehistory from the 4th millennium cal BCE as a history of changing standards of mobility, it is very possible that in fact people at subsistence level were the ones who resettled the tells in the southern Balkans while the wealthier people continued in their pastoral economic pattern. This may explain some of the paradoxes like the huge difference in the thickness of the cultural layers between Yunatsite and Dubene-Sarovka site, for instance. While Yunatsite developed a typical agricultural community with stockbreeding only as a secondary economic activity, the population of Dubene-Sarovka was semi mobile/semi sedentary and it continued its style of life and left thinner cultural layers because the community at the village was also involved in a pastoral economic patterns, including trade. Logically, the wealth and connectivity resulted in extensive contacts including long-distance trade not only in Anatolia (see e.g. Bass, 1966), but also between the Balkans and Troy, a fact well-documented in the Dubene-Balinov Gorun treasure, for instance (Nikolova, 2005-2006). The axe of Dubene-Sarovka was made from lead bronze, which was characteristic of the Aegean, while the shape connected the Upper Stryama valley with Central Europe (Nikolova, 2002). In other words, the mobile social status, the opportunity for the accumulation

of wealth and the development of an upwardly mobile population was the result of a combination of factors and the selection of a dynamic economic strategy. There is no single evidence that in the Early Bronze Age the typical trade relations had a chain character as Chapman (2008) guesses for Europe. Some authors even believe that Thrace developed trade centers like Gulubovo (Leshtakov, 1996) or perhaps developed central places for trade together with other means of communication and alliance maintenance, like Yunatsite (Bailey, 1995: 210). More colorful is the picture A. Sherratt paints who pays special attention to the diachronic transmission of the social status while for him trade is embedded in the model of “opportunistic fashion for temporary goals” (2001: 201)-see also Gale, 1991 for the Mediterranean region.

The interrelation between men, women and wealth is also important for a more adequate reconstruction of the past. It is usually accepted that rich female graves during Early Bronze Age were a result of an ascribed status; in other words females possessed wealthy clothes and jewelry because of the high status of their husbands (O’Shea, 1996; see also Ehrenberg, 1989). However, wealth itself is not a criterion of a high social status, it just indicates that there were rich people. As in our modern society, not all rich people really held a leading social position in prehistory. This is very clearly demonstrated in the graves of Pit Grave Culture at Goran-Slatina (Early Bronze Age) (Kitov, Panayotov & Pavlov, 1991), where the buried population as a community possessed a higher than subsistence level life, demonstrated for instance in the popularity of the jewelry. Unfortunately, the skeleton material from Goran-Slatina cemetery was lost before its analysis, so no physical anthropological characteristics of the buried population exists for correlation with the burial goods. Another cemetery that demonstrates average high living standards is Mokrin (Early Bronze III, later 3rd millennium cal BCE) (Girić, 1971; O’Shea, 1996). Together with married women, it seems that the wealth could have been inherited from parents to children and distributed amongst both genders-males and females.

There are many other instances that show that a more detailed analysis of the combination of the different criteria of social statuses may paint a much more colorful picture of the social development of the prehistoric population than the usual standard type of poor-rich, and low-high status.

The combination of criteria would also provide a foundation for the determination of the social status type (Benoit-Smullyan, 1944). If there is a grave of a child with a documented disease, without inventory, placed on the periphery of tumulus from Early Bronze Age, one would probably infer that the child belonged to low secure or even unsecure social status. However, if there is a rich grave of a body without determined health status, one would conclude it belonged to an individual of high secure status. The conclusions would be different, however, if disease was documented for this individual since presumably disease changes the status toward lower secure status.

7.3.7 Health and Social Status

Health is one of the most important biosocial constructs of human personality and of human society. For people to be healthy, the contributions of society to their well-being is a crucial component of the evolution of human civilization (see also Marmot, 2004; Cochran & Harpending, 2009; Broughton, & Cannon, 2010).

Many disciplines intersect at the topic of human health-medicines, forensic psychology, public health, palaeonutrition, archaeology, physical anthropology, sociology, etc. (Gilbert & Mielke 1985; Bush & Zvelebil, 1991; Lewis, 1994; Bebbington, Fowler, Garety, Freeman, & Kuipers, 2008; Beam, 2009), theoretical medical anthropology (Alland 1970; Atkinson, 1972; Vaughan & Coulson, 2000; Allen & Hatfield, 2004; Littlewood 2007b; Sobo, 2004; Wiley & Allen 2009), medical and environmental archaeology, bioarchaeology and archaeometry (Rogers & Waldron 1995; Cook, 2000; Buikstra & Beck 2006; Lewis, 2011; Lewis, Jurmain, & Kilgore, 2013), family and marriage therapy, paleopathology, social anthropology (Cohen 1989), ethnographic and regional medical anthropology (Frankel & Lewis 1989; McClain 1989; Domett, 2001; Ember & Ember, 2004; Zayas 2008), palaeoepidemiology (Waldron 2007), narrative medicine (Camp 1973), archaeobotany (Zohary & Hopf 1988), etc. In other studies, health is not revealed as a theme, although the focus of its research is in many cases food and subsistence. It is also worth mentioning, that out of the United States, it is still possible for archaeological research based even on the latest technologies to miss research themes regarding health and diet. (Reindel & Wagner 2009). This fact shows that anthropological research on health and the development of bioarchaeology strongly influenced the way it researched prehistory in the United States by expanding the study towards the most essential albeit neglected past topics.

In contemporary humanitarian academic literature, medical anthropology is one of the leading disciplines in health research. It emerged as an aspect of the development of applied perspectives of anthropology, the roots of which go back to the post-World War II studies and incorporation of anthropology into international public health efforts for improving the policies of economically poor nations in the field of public health (Sobo 2009: 57). In the late 1960-early 1970 medical anthropology was institutionalized, giving birth to the Society for Medical Anthropology, which is now a section of the American Anthropological Association.

There are numerous research directions in medical anthropology, each of which developed its own methodology. Some of them are institutionalized through academic education and have even developed PhD programs, while others require crossing education and specialists' knowledge in the fields of anthropology, philosophy, archaeology, medicine, genealogy, public health, ethnography, linguistics, mythology, therapy, forensic psychology, etc. Although in past, medical anthropology was focused mostly on international health care, the interest in this subfield of anthropology

stimulates the development of medical anthropology (or health anthropology) into theoretical, historical, ethnographic (national) and cross-cultural (international), etc.

Table 7.1: Medical anthropology and its branches.

Discipline: Anthropology		
Fields	Subfield (Anthropology crosses with other disciplines)	Branches
Theoretical	Medical anthropology	Theoretical medical anthropology
Archaeology		Medical archaeology
Linguistic anthropology		Linguistic medical anthropology
Bioanthropology (physical anthropology)		Biomedical anthropology
Cultural anthropology		Medical cultural anthropology, medical ethnographic anthropology, medical cross-cultural anthropology, medical international anthropology, medical national anthropology
Genealogy		Genealogical medical anthropology
Historical anthropology		Historical medical anthropology
Applied anthropology		Applied medical anthropology

Theoretical directions of medical anthropology are at the forefront of research. Classifications of medicine are based on different criteria-organization, expertise, institutionalization, etc. Kleinman's tripartite typology of medicine - popular, folk, and professional (1978, after Sobo 2009: 65) is reduced to the conventional (Kleinman's popular and folk) and vernacular by Bonnie O'Connor's model (1995, after Sobo 2009: 65).

It is essential to learn how people understand etiology or the causes of illnesses. Cross-cultural studies allow for the construction of different categories to study internalizing or externalizing systems (Sobo 2009: 61). A. Young (1986 [1976] proposed in the later part of the 20th century a model of evolution of health systems, according to which internalizing systems evolve from externalizing systems as societies grow increasingly complex (after Sobo 2009: 61). G. Foster (1976, after Sobo 2009: 62) distinguishes between naturalistic and personalistic medicine. E. J. Sobo defines both categorization systems as *etic*, while the distinction they index is unimportant from an *emic* point of view. Other groups of categories describe the medical subsystems-nursing, social work, occupational therapy, dentistry (Sobo 2009: 64), traditional medicine, etc.

Medical anthropology and related disciplines on health offer a wealth of thematic topics during the last decades that address anthropological aspects of global health (Nichter & Lock, 2002; Nichter, 2008; Perlman & Roy 2009; Birn, Pilay, & Holtz 2009), public health (Pfeiffer & R. Chapman 2010), illness (Garro 2000), social aspects of infections, ethical issues of biotechnology, health aspects of famine (Dirks, 1993), etc.

Global health research shows peculiarities in understanding illness, although it is still missing a coherent science of global health (Nichter 2008) that would illuminate the complex link between global and local and the structure of the interaction at different levels-resources, technologies, values (Bailey, 1998; Graeber, 2001, 2011), social practices, etc.

The technological ability to alter human biology becomes a critical issue, since ambiguous consequences from a technological approach to genetic, neurological or cosmetic 'enhancements' (Hogle 2005) maybe invertible for human civilization.

Developing of the mapping genes for common disorders is a new approach to human genetics that is carried out by combing the extensive genealogy of an isolated population with powerful genome sharing methods (Kong, Gulcher & Stefansson 1999).

A special branch of health research focuses on the different systems of treatment of diseases-from symptom recognition (known in the past as "the health seeking process") (Sobo 2009: 60) through to patterns of rehabilitation. Special attention is given to traditional healers and healing around the world (e.g. McClai, 1989).

Stress is one of the most popular critical states in the evolution of human civilization (Goodman, Martin, Armelagos & Clark 1984). Bioanthropology provides abundant data from prehistory while written records and ethnographic research help us to learn about the specifics of stress during different historical periods and through to the present.

Other special topics in health research include diet and nutrition (Wiley and Allen 2009, Vaughan and Coulson 2000), growth and development, grandmother theories, reproductive health, aging (gerontology) (Binstock & George 1996; Ferraro 2010), infectious disease (Wiley & Allen 2009), sex, health and disease, mental health (DSM-IV-TR, 2000; Wiley and Allen 2009), etc.

Future directions of medical anthropology have been analyzed from global perspectives (Nichter 2008).

The aim of Health Service Research (HSR) is to improve health within the different social systems. Avedis Donabedian, a HSR pioneer, points to series of necessary steps to move society in such a direction (after Sobo 2009: 119): 1. an available health care system for access; 2. it must be accessible by people; 3. there must be services available for use; and, 4. the technical and interpersonal nature of the of services must be high.

Although we know that in the first millennium physicians diagnosed diseases by means of patients' urine and pulse, and the therapy included bleeding, cauterization,

pharmaceutical remedies, dietetic remedies, the application of prosthetic devices, surgery, etc., what we still do not know is how deep the genesis of these practices are. The quest for these origins depends on the development of our knowledge of prehistory and will continue if we are able to develop and deepen our understanding of the past. For the time being, we simply have data points regarding the presence of specific diseases, without having the opportunity to learn about how these diseases were cured.

Paleopathological literature reports cases of congenital diseases, trauma, metabolic diseases, inflammatory (infectious), circulatory disorders, degenerative diseases, and hyperplasia and neoplasia. Many case studies originate from research of mummies, while the direct record from the Balkans is only dry bone.

Congenital defects may be hereditary or they can be acquired between fertilization and birth. Spina bifida is a common congenital anomaly in archaeological samples. Other diseases with archaeological or ancient written and/or visual evidence include Alkaptonuric arthritis (ochronosis), achondroplastic dwarfism, hydrocephaly and osteochondromatosis (Zimmerman & Kelly, 1982: 6-7).

Infectious diseases is the main candidate for the high mortality of all deaths before old age. Unfortunately, not all of them can be documented directly in the archaeological record, especially through anthropological bone records. Using medicinal flora, investigating the lifestyles of the population, and researching animal bones may provide indirect evidence. Archaeological bone may also keep traces of numerous infectious diseases (Kelly 1989).

It is believed that parasitic infections (body and head lice, trypanosomes, and intestinal protozoa) were probably wide-spread amongst the earliest human groups with their mobile style of life. There were also probably diseases transmitted from wild animals to man (zoonoses) such as sleeping sickness, scrub typhus, tetanus, tularemia, and schistosomiasis. In addition, Kelly (1989: 192) distinguished nonspecific infections that resulted from staphylococcus and streptococcus that would have produced periostitic and osteomyelitic lesions.

Sedentary life would have exposed ancient people to specific contagious diseases related to waste accumulation, such as hepatitis and dysentery. Domesticated animals exposed people to anthrax, Q fever, brucellosis, psittacosis, bovine tuberculosis, and perhaps even echinococcosis. Other groups of epidemic diseases would also result from population growth.

An essential factor for the spread of infectious diseases is acute or chronic nutritional inadequacy. These in turn reduce the availability of nutrients. There is a synergism between age, diet, and infectious diseases. Deficiency in dietary iron or other nutrients can make individuals of different ages more susceptible to infections; this is particularly the case for children, pregnant and lactating females (Kelly 1989: 194). Scurvy, rickets, and iron-deficiency anemia are examples of nutritional deficiency diseases that have been documented in the archaeological bone.

Table 7.2: Cultural preventive health response, after Anderson (1996: 197-199) based on case study from Sardinia (Brown, 1981).

Category of health-related behaviors and beliefs	Examples	Preventive health concept or cause of disease/death
Deliberate health-related customs that promote health	Avoidance of drafts and dampness, not getting either too cold or too hot, not consuming cold drinks on a hot day, avoiding overexertion, attempting to eat well regularly, taking alcohol drinks only in moderation, not sleeping out-of-doors, not going bare-headed, always wearing plenty of clothing, and not sleeping in a room with an open window (Sardinia case study)	Cultural response to malaria: If you get caught in a draft you might catch or experience a flare-up of rheumatism
	Living on hilltops (Sardinia case study)	Cultural response to malaria: It is healthier to live where quality of air is good, cleaned by healthful winds. In fact, the altitude and breezes reduce mosquito activity, then, this pattern has the effect of reducing malarial exposure (Sardinia case study).
Customs not perceived to be health-related that nevertheless enhance health	Transhumance pattern – grazing of the flocks in lowlands areas throughout the winter (, November-May, off-season for malaria), and exploiting mountains pastures during the peak of the malarial cycle (Sardinia case study)	The transhumance pattern indirectly response to malaria
Behavior not perceived to be health-related that contributes to morbidity or mortality	Harvesting in the lowlands expose the field-workers to malaria (in contrast to shepherds)	Subsistence and environment cause exposure to disease
Deliberate health-related customs that contribute to morbidity or mortality	Stopping prescribed medication as soon as the patient feels well (Brazilian case study)	Creation and spread of drug-resistant strains of the parasite.

Three categories of human responses to infectious diseases have been distinguished: genetic, physiologic and cultural. As an example of cultural response, R. Anderson (1996: 197-200) refers to four categories of health-related behaviors and beliefs proposed by F. Dunn; those that are, deliberate (intentionally concerned with health), non-deliberate, health-beneficial and health demoting (see also Eaton, Eaton, & Cordain, 2002).

Human bone from prehistoric graves show many traces of trauma. Unfortunately, we do not have a detailed analysis of most of the excavated burials. Recently, after the simplified publication of the Durankulak cemetery, excavating ancient burials also encountered problems regarding ethics and humanity.

The kinds of injuries that may be distinguished from the bone record include: fractures (the most common traumatic bone injury), dental trauma, weapon wounds, dislocations, scalping, surgery, trephination, amputation, other surgery, perimortem cuts and breaks, physical force, cold, heat, chemicals, and irradiation (Zimmerman & Kelly, 1982: 7).

Among the most prevalent in the Balkans is evidence of trephination. This was discussed by Hippocrates in his special section on injuries of the head. Recently health in Balkan prehistory was analyzed in details from perspectives of trephination by A. Comşa (Nikolova, in print).

Trephination is a surgical modification of the skull that has two main functions- as a cure for a disease and as a ritualistic act. In prehistory these activities may have both overlapped to create a cross-society global subculture with endless analogies worldwide, that may have or not have direct cultural synchronic and diachronic interactions. In other words, trephination is an independent way of the relation of people to certain conditions and a response that manifests similarly world-wide from an archaeological perspective. This is the case even though it may have been a culturally controversial practice. Current medical techniques that utilize the trephination of different parts of the body for both humans and animals confirm that it successfully treats certain conditions. This example opens up the possibility that in prehistory skull trephination was just one of the aspects of this type of intervention into the body.

Professionals have only been able to describe and explain mental deviations in specific scientific terms very late in human history. Although it is difficult to differentiate between efforts to cure and trephination practiced as a part of rituals, both variants served to increase the secure status of people.

Causes of obstetric deaths can be puerperal fever, dystocic presentation, obstructed labor due to a malformed pelvis, breach birth or an oversized fetus, haemorrhage or premature detachment of the placenta.

Another factor of health related to a secure status were medical herbs. All categories of humans that interacted with these herbs-consumers, gatherers and distributors and practitioners, either possessed higher social status or gained greater security of status by suing, distributing and communicating health. The guess of A.

Comşa about the hemp plant (*Cannabis sativa*) as being one of the oldest in use in herbal medicine has confirmation in data from Central Asia which is considered to be the homeland of this herb. The data from Gurbăneşti which belong to the nomad Pit Grave Culture can be used in the future for possible cultural model based on which Pit Grave Culture communities were the main distributors of herbs from Eurasia to Central Europe. Through the systems of nomadic cultures (the Pit Grave Culture, Afanasevo, Andronovo and, to the east all the way to Xinjiang, ancient Balkan medical skills were connected with two other gigantic centers-Caucasus and Tibet. The herb horizon Tibet-Caucasus-the Balkans (the Carpathians-Stara Planina-the Rhodopes-Pirin and Rila) is a working hypothesis that can be further extended to the Alps. The research in depth of this horizon from perspectives of the prehistoric medical anthropology may reveal extremely important cultural patterns and structures of human social relations, comparable with the Silk Road or even overlapping with the Silk Road.

Ethnographic models help to better understand how the people accepted and used medical flora (Nikolova, in print b; Ethnobotany, online). For example, in Trinidad, bush medicine was valued as traditional wisdom whose “ready availability in villages like Pinnacle argues for superiority of rural life over that in town”. Such an emic view confirms that traditional cultures are health-oriented and that all aspects of preventive health and remedies was high, carried a high cultural status. Every adult in the village of Matelot “has a working knowledge of some bush and most can describe the properties of between thirty and a hundred”. About twenty of the plants were in common use. Everyone had favorites, but it was easy to switch from one to another plant in favor of another recommended or supplied by a neighbor. Bushes were grown in the house yard or were easily found in the forest. Causes of sickness were weather and climate (1), conditions of work (2), changes in the hot-cold balance of the body (3), or the neglect of some other health precaution (4). Small quantities of bushes that were used for particular sickness could also be taken for its prevention (Littlewood 2007: 20-21).

The gradated “hierarchy of resort” (after Romanucci-Ross) was probably embedded in prehistoric responses to diseases. According to this concept, with a developing understanding in the medical anthropological literature, people first try one thing and then try another until satisfied. The patterns of resort “involve many types of treatment, in parallel or pluralistically, at once” (Sobo 2009: 60). Pliny the Elder’s *Natural History* and Dioscorides’ *De material medica* are among the most famous ancient works that offer extensive attention to role of herbs in healing. It can be proposed that developments of knowledge about medicinal plants was a goal that most prehistoric communities wished to achieve because just as they do today, plants provided the best cures. Climate certainly influenced the variation of herbs, although there is still research missing on the evolution of the herb distribution in the Balkans (see also Weninger, Clare, Rohling, Bar-Yosef, Böhner, Budja et al., 2009). Unfortunately, it is difficult to impossible to find arguments that any given sample of herbs discovered on an archaeological site was used for medicinal purposes. However,

accumulating knowledge on documented plants that are usually described in the specialized literature as weeds or regular fruits, although known today as medicinal plants, as well as studying their context in broader areas may result in gathering a more specific criteria of which plants were used in prehistory for remedies, and thereby expanding our knowledge of health and the complex prehistoric society.

Numerous data on Balkan archaeoflora originate from archaeological sites from different parts of the Balkans. Unfortunately, this data is not sophisticated because even early in the 21st century some archaeologists worked on sites without archaeobotanists, and in some cases the methodology of archaeobotanists was not well developed. Also, in comparison to other parts of the world, the Balkans provide only limited data about the ways archaeoflora directly connect with people's lives.

Medicinal flora cannot be studied in isolation because of the polyfunction role of ancient herbs. A typical example is Boraginaceous medicinal plants. *Lithospermum officinale* (gromwell) was documented at the Vinča site at Opovo (Borojević 2006: 39-40). Five seeds were mineralized without being accompanied by other plants. Borojević suggests that the seeds possibly were picked while cereal grains were being cleaned, or were brought in by ants. She refers to *Lithospermum officinale* as a medicinal plant, although she does not make any suggestions for its role at Opovo.

In the past, J. H. Gaul pointed to a grave from Gumelnița culture where over 600 perforated gromwell seeds were documented to have been used as beads (Borojević 2006: 39). In Central Europe, fruits of *Lithospermum purpureo-caeruleum* were also found to be used as beads as early as the Neolithic period. Based on grave finds from China, it has been proposed that an aesthetical function was the main use of *Lithospermum officinale* seeds. Currently, the extract of *Lithospermum officinale* is included in some cosmetic recipes for hair. In Bulgaria today special laws defend some Boraginaceous medicinal plants, for example *Cynoglossum officinale* L. and *Pulmonaria officinalis* L.

The family Boraginaceae includes about 2000 species all over the world divided into four subfamilies: Boraginoideae, Heliotropioideae, Cordioideae and Ehretioideae. Many of them have antioxidant, anti-inflammatory, anti-viral, anti-bacterial and hepato-protecting medicinal qualities because of their polyphenol properties including phenolic acids and flavonoids.

Early data about Boraginaceae come from M'lefaat (Iraq), Aceramic Neolithic (Gale, Nesbitt & Savard 2003). Seeds of *Heliotropium* sp. were discovered at Jeitun (southern Turkmenistan) in the earlier Neolithic context. It is also reported from a Holocene context in India.

Boraginaceae is among the medicinal plants documented in Peru (Hammond, Fernández, Villegas & Vaisberg 1998). It is interesting to compare the healing function of some species Boraginaceae used in two independent regions like Bulgaria and Peru.

Ethnographic research also points to the prominent role of women as healers (McClain 1989). Feinerman (1989: 30-32) distinguishes the following health care resources in Saraguro: curanderos, herbalists, midwives, pharmacists, nurses, physicians. The first three categories can be connected to prehistory. Herbalists and midwives can be compared with the Roman's "practical" medicine, while the curanderos correspond to the vague level of Etrusco-Latin religious and magical medicine (Scarborough 1969: 25). Further, the Druids were interpreted as priest-physicians (Garber 2008: 6), and represent the model of healers who were also involved in religious-astronomic practices, as it is evidenced from Pliny's text:

'They believe that anything growing on oak-trees is sent by heaven. The mistletoe was collected on the sixth day of the Moon. Then, greeting the Moon with the phrase that in their own language means healing all things ...' (after Garber 2008: 7).

Records from different epochs show that prehistoric medicine was most probably multilayered and included at least three levels: (1) household level where the women dominated (1), specialized practitioner witches (2), and priests (3). We also can propose that there was a regulation over food and beverage consumption by norms, rituals, and taboos.

There is not much evidence to prove this model for Balkan prehistory. Medicinal plants discovered in household contexts may prove to fall into the first category. Candidates for the second and third categories would probably be some of the prehistoric female figurines that were multifunctional. One of the possible functions would have been magical (healing) and stimulating fertility and healthy life. Some of the figurines could also possibly be interpreted as healers.

There are also dolmens in the Rhodope and Strandhza Mountains, with analogies in the Caucasus (Smith, Badalyan, & Avetisyan, 2009: Plates 78-79). They have been most often interpreted as tombs, although no skeletons were discovered with them. Distant analogies would be Stonehenge in Europe and the medical wheels in North America (Garber 2008: 3-6). Existing data cannot exclude an interpretation that would connect the dolmens and stone circles not only to burial customs but also to healing practices in antiquity. Oak was sacred for the Druids and while it is possible the whole Rhodope Mountains were thought of as sacred since they were the birthplace of Orpheus, for the people who lived there they may have had a more secure status. The reverse could also have been true: the myth of sacred mountains may have been distributed widely in order to secure the status of people who lived there.

From the perspective of health and social status, the special interest for prehistoric research is the role and status of clay. Not only was this one of the most important resources for the everyday existence of prehistoric communities, but it may have been an important component for special events, similar to the role that sacred places, sacred objects, etc., played (Beck, Bolender, James, Brown & Earle, 2006).

Clay is widely used today as a physical preventive health and aesthetic tool, as well as a remedy (Nikolova, 2011). The analysis of Cucuteni pottery from Romanian Moldova showed that white pigment was made from clay rich in Ca (kaolin); this is a substance widely distributed in Romanian Moldova. The red pigment was also a clay-base rich in Fe and Ti as reinforcing agent. The black (dark brown) color was due to the presence of Mn and Fe. It has been presumed that the clay used for pigments was rich in minerals and that it was also popular as a preventive health food supplement. It was even eventually utilized as a tattoo pigment. With these properties in mind, it is possible to conjecture that a health component existed in the meaning of the decoration colors. Visually, the Cucuteni vessels have some anthropomorphic characteristics so an interaction between the meanings applied to the vessels and the human body appears to be likely (Nikolova, 2011).

The example described above regarding clay shows that in prehistory people interacted with nature and material culture in a way that in turn served to better secure the social status of the individuals. The multi-status or status set characterized the statuses of not only the members of society, but also the material culture and the natural resources used by the people (see also Meigs, 1990). The health components of the material culture increased not only the health status, but generally the social status of individuals since health was probably one of the leading criteria for attaining a higher social status.

Typically, people are generally healthy as they grow into adulthood and healthy people begin to deteriorate because of aging approximately after age 70. The age of intensive aging is a historical category. In prehistory it is believed that intensive aging may have started perhaps after about the age of 40. It is still unclear how the different prehistoric cultures responded to aging and whether there was an attempt to decrease the lower border of intensive aging.

In our contemporary society there are many historical diseases like diabetes (see e.g. Seo Yeon Jang, 2009). One of the main reasons for this disease and others like it is food.

There are several categories for food security as regression determinants: High FS (Food Security); Marginal FS; Low FS; Very low FS (Seo Yeon Jang, 2009: table 11).

It should be expected that HFS and MFS are criteria for wealthier people or for a higher social status (according to standard assumptions). However, such conclusions may not be true even for considerable segments of society, since many people at subsistence level or at level of initial accumulation of wealth (Nikolova, 2010a) may have a strong and healthy food culture especially for children, and the healthiest among the population may come from such families. The opposite can also be true. When women become actively involved in social-economic pursuits, wealth may also be a factor for health deterioration when children left without supervision and who may as a result have the and increased access to a LFS and VLFS style of life including non-healthy junk food. School food has recently been also a subject of detailed reexamination for this very reason.

In prehistory, a specific problem was the dependence of people on weather and the prevalence of malnutrition when there was a paucity of seasonal food.

Environment influences the health of people in a variety of ways. In prehistory, cold and very hot weather may have led to epidemic environments. The evidence of garbage pits next to houses indicates that cleanness was a specific problem and that it was probably not always resolved according to standards of preventive health. One of the main reasons for burning houses or whole settlements and re-building them on the same place or migrating the whole community to another place was probably for reasons of hygiene reasons. Such activities reflected social status in different ways. The renovation of settlements may have caused social status mobility including the changing of the property of specific households, exclusions of some household from the village community, incorporating new households, etc. This is another way that physical health connects to social health; a high social status would also mean good social health that does not necessarily equate to a wealthy social status. As in the contemporary world there is a big difference between wealth and a high social status; in prehistory presumably wealth was also just one of the social markers that did not directly correlate with the social health. Ethnographic data confirms that wealth is not the only criterion for social status (Bascom, 1957).

7.3.8 The Wealth of Learning

The household can be proposed to be the main social unit responsible for the enculturation and socialization of children. Enculturation is accepted as the individual development of the individuals, while socialization (Williams, 2003) is directed towards a specific education of the individuals as members of given community. Both processes contribute to building a strong self-awareness not only as self-esteem, but also as awareness of how others look at us (see For self and society Branaman, 2001). Merlin Wilfred Donald, a Canadian psychologist and cognitive neuroscientist is recognized as a pioneer of the modern research of enculturation as a process of primary importance for the evolution of the human beings (see e.g. Donald, 1998).

Knowledge increased the secure social status of the different members of communities and it was an important factor in moving towards positions of high prestige. This fact is well documented in the instance of mixed traditions of production of fledge axes during Early Bronze Age. The Dubene-Sarovka axe was composed of the typical Aegean lead bronze although its shape was similar to those found in Central Europe.

Different speculations have been raised regarding the number of members within prehistoric Balkan households (Nikolova, in print d). According to indirect data from the later Copper Age, one feasible model estimates that they held on average 6-8 people (based on data from the Yunatsite tell). Models of two and three-generational households as well as sibling-sharing of houses may be further proposed for Balkan

prehistory. We do believe that grandparents were actively involved in the enculturation process and that specific relationships between siblings took place, including sharing a house and organizing as a single household. However, direct evidence is missing, and this problem requires future research. For now, it is worth recognizing that enculturation was a very complicated, complex and multi-dimensional process involving different generations and people with close and distant kinships or even common-interest relations. Indirectly, this is confirmed by the fact that life in a multi-leveled community requires the reproduction of similar patterns of solidarity within several generations; this is ethnographically documented in village communities by strong kinship connections and a richly ritualized life.

We can propose that the enculturation process in prehistory that was a life-long endeavor starting with the birth of children. If we accept that some or most of the household members were seasonal producers of ceramics (including pottery, figurines and other ceramic objects), we should also propose the participation of children in this activity. Using ethnographic models of specialized potters, the task of teaching children pottery production might have been one of the essential goals of the family, and the early mastery of this knowledge may have been one of the requirements for children to remain in a given household until they reached the age of adulthood. Small cups or miniature models of different types of vessels discovered on prehistoric sites in the Balkans could have been made by parents or even by the children themselves as a facet of their education.

Since pottery production was an essential activity of every prehistoric village, it widely involved in a variety of symbolic communications. The most expressive of these was ornamentation, but signs on the vessels represent a level of abstract thinking that probably expressed codes for specific cultural messages (household, genealogical, religious, social, etc.). On one extreme, some expressions are composed of simple signs, while on the other, there are instances of pre-writing formulae (probably used in special religious or witchery rituals) as an expression of sacred knowledge, that in turn point to a possibly advanced level of social stratification. Recent evidence about the signs of pre-writing is not limited to ceramic finds, but perhaps to wooden finds as well (e.g., the records from Dispilio). We can logically propose that the distribution of pre-writing signs was much wider and more complex than is usually documented by archaeology.

To try to decode these signs is beyond the goals of this study. There is another objective that we have been following - to include the signs within the household context as a symbolic means of communication.

To begin with, both biological and cultural reproduction were equally essential for prehistoric households. The beginning of a new generation was probably preceded by marriage, although we do not have direct evidence for the existence of traditional forms of marriage in any Balkan prehistoric culture. That problem requires further special research. Usually double graves in prehistoric cemeteries (male-female, adult-child) are interpreted as family burials, but they may also include other rituals

and social norms related to siblinghood, grandparents-grandchildren, lineage and religious traditions, etc. Future contextual analysis of the signs may be enlightening, since vessels with signs might have functioned as gifts exchanged between non-blood/blood kinship groups or between social groups with a common interest.

The institutionalization of new kinship relations required a number of ceremonies that presumably involved material culture in a system of gift exchange (pottery, figurines, non-artificial objects, etc.). Incised ornaments with clearly symbolic meanings (like the meander ornament), occur on one and the same type of objects (e.g., figurines) in relatively distant regions during prehistory (as in the Vinča culture of the west-central Balkan region and in Samovodene in north-central Bulgaria). Their significance is more convincing in terms of common household traditions and cross-cultural interactions and gift exchanges than in terms of a common Goddess. In other words, beliefs and symbolism (Foster, 1994) concerning ancestry were possibly more strongly represented in everyday and ritual objects than was the abstract supernatural being. Even in some modern religions, it is a common belief that people live to serve their ancestors. Since in prehistory the idea of fertility was directly connected with the biological reproductive function of the woman, the female image of fertility was logically much more popular than the male.

7.3.9 The Social Mind and Security

Materiality is only a precondition for the meaningful life of people. The emergence of art in Paleolithic, a period when subsistence strategies dominated, shows a social mind that was always a combination of a quest for a secure style of life and secure style of thinking. We may not walk all day, but it is impossible not to think. Such a statement together with all the wealth of supernatural beliefs may lead to the conclusion that spirituality is even in some cases a stronger factor of security than materiality is. A strong spirit and social mind mean a healthy social life.

The Balkans is one of the regions richest in prehistoric records that demonstrate a possible evolution of the social mind over thousands of years of sedentary, semi sedentary and mobile lives of communities at dominated subsistence levels of life standards. There is evidence of extraordinary richness (Varna, Rupite, eventually Dubene-Balinov Gorun, etc.), but it appears as though accumulated wealth as either community oriented and dedicated to supernatural beliefs, or it was easy to treasure in the earth as burial goods. This leads to the conclusion that not all wealth was thought of as a primary means for securing social reproduction.

7.4 Social Complexity and Social Status: Yunatsite Culture Case Study

Complexity is a social stage of development of the differentiation and cooperation of different components of society. It can be presumed that complexity emerged with the beginning of human society (cp. Arnold, 1996; Bar-Yosef, 2001; Bentley & Maschner, 2008), although some authors connect complexity with the state level of political organization of human society. The gradual producing and reproducing of specific social relationships characterize the development of social complexity in Balkan prehistory. With this understanding, we focus on the accumulation of societal hierarchy in the context of vertical social relationships and complicated interrelations between social severance and solidarity. Hence, in our understanding, the prehistoric social and political system was a type of stable human achievement because of the dialectic interaction of two possibly opposed phenomena-hierarchy and solidarity. In this system the household was presumably the elementary social unit and it was the main social agent of the vertical aspect of enculturation (the transmission of culture from generation to generation). Multi-scale external relations of the communities were of primary importance, however, in the process of horizontal aspects of enculturation, as well as during the development of different levels of social-economic and political organization.

There are different ways to approach Balkan prehistory and more generally prehistoric societies (in other words, societies that lie outside of written records). Possibly the best way to describe the contemporaneous methodology is through this crossroad:

Usually sources 1-3 are the most popular foundation for building interpretation models for Prehistory. It is often considered that contemporaneous thinking and our social practices influence negatively the cultural models we create about the past (e.g. Broodbank, 2000). Many elements and especially psychological motivations, however, for actions in our everyday life (Baldwin & Baldwin, 1998) may be good sources for models and hypotheses of Prehistory as well. A typical case would be when we study the role of the individual in the production and reproduction of a given social grouping. This is especially true when the focus is on the prehistoric complexity development related to formations like chiefdoms (Barker, 2008; Earle, 1993, 2008). The success or the failure of the political formation in question depended on specific social structures, relationships, strategies-- in other words it relied on all members of the group and especially upon the leaders. Just as today we have successful, dysfunctional and even regressive social small-scale societies that have developed in a similar global social environment, it is likely that in Prehistory the success and failure of any given social formation depended heavily on the individual enculturation and many psychological factors. Moreover, ethnographic societies in many cases have a level of social complexity that is below the level of the achieved social development of their societies and for this reason they cannot be used straightforwardly as an archetype since the result is a lessening of the level of the social complexity in the researched prehistoric

societies. An excellent example of this is Broodbank's impressive monograph where he cites a case where he doubted Renfrew's model of possible chiefdom in the Cyclades during Early Bronze Age (2000). While the methodology of C. Renfrew was based mostly on 1-2 sources and especially on the level of complexity of the synchronous prehistoric societies, he widely included source 3 to make C. Broodbank believes that the material culture of the Early Bronze Cyclades could have been left by a society of a moderate social complexity. Last but not least, historical sources are usually not very popular in studying prehistoric societies, but our understating is that many prospective case studies would help to understand Prehistory in depth much better.

A second preliminary methodological point for our study is the fact that when we study the cultural contacts archaeologically, we usually study an area of distribution of certain material evidence. However, in Prehistory the people exchanged not only objects but also relationships and behavior. The objects themselves were just tools to practice specific social strategies and behaviors. To use an analogy with our ordinary lives, we do not work for wages, but we work in order to use our wages to facilitate our everyday social relationships. We do not buy objects to possess the objects but to build, exchange and reproduce social relationships. In other words, studying material objects out of their social contexts is a cancer-sick methodology that in many cases creates general theoretical deviations from the real past. Archaeology is a subfield of anthropology and the typological approach towards the material culture should be not a goal but is only a first step of archaeological research. It does not mean that we should not have profiled specialists in typology but rather that this should not be the final goal of archaeological science.

During the last decades the evidence for the social development in the Balkan Early Bronze Age, has considerably increased (Nikolova, 1999a). Although previously, the Vučedol culture was a symbol of prosperity during the Early Bronze Age, new evidence especially settlement and burial data from the Yunatsite Culture (Western Thrace) has allowed for the creation of a variety of cultural models including even an incipient chiefdom (Nikolova, 1999a) during the third millennium cal BCE.

From this approach the Early Bronze Age includes the Balkan cultures that developed in the span between c. 3600 BCE and the end of the third millennium BCE (Nikolova, 1999a, 1999b, 2000a, 2000b, 2002, 2005-2006; Nikolova & Görsdorf, 2002) while our focus is on Early Bronze II (about 3000-2500/2400 cal BCE) and Early Bronze III (about 2500/2400-about 2000 cal BCE).

Below we will discuss data from the Yunatsite culture (Western Upper Thrace) (Figure 7.5) regarding their settlement patterns, metal finds, pottery and burial rites as an opportunity to analyze the interregional social communication in the Balkans, that has been understood as an aspect of the enculturation process of the given communities. We will test this evidence against the level of social complexity that existed and will address such issues as status archaeology, chiefdoms and social hierarchies by arguing that enculturation is a fundamental cultural concept for constructing cultural models in Prehistory.

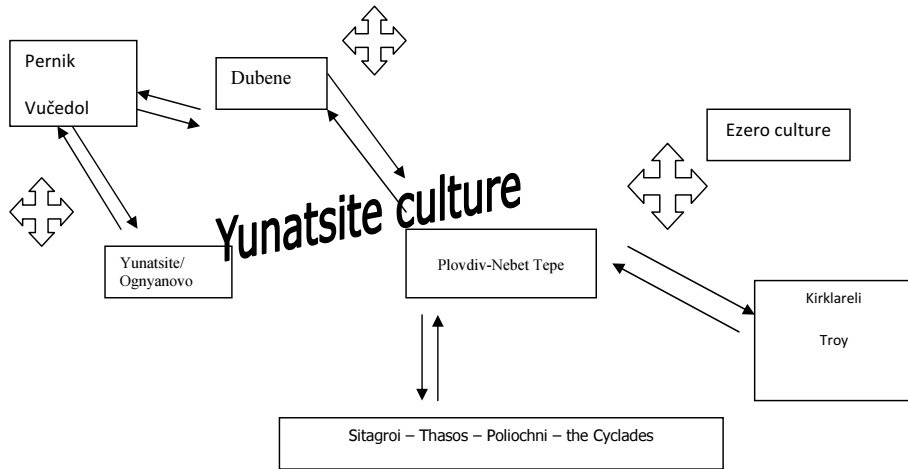


Figure 7.5: Yunatsite culture. Early Bronze Age (later 4th-3rd millennium cal BCE) in the upper courses of the Maritsa and in the Stryama valleys (Bulgaria).

The Upper Stryama region and the Upper Maritsa/Lower Topolnitsa valleys were suitable for both agriculture and stockbreeding, which guaranteed the subsistence of the population that lived there. That in turn opened up the prospect for intensive external relationships in western and southern directions through the mountains of the Sredna Gora and the Rhodopes despite the fact that geographically the region was more open to the area of the Ezero culture.

There is no special demographic study on the Early Bronze Age population in Thrace. Based on the data from the Upper Stryama valley we postulate a micro regional rate of 400-1000 people as a base for the formation of a relatively independent social-political group.

The focus of this approach is Western Thrace, where during the Early Bronze Age the Yunatsite culture developed. Among documented settlements, the key sites of investigation as well as possible micro regional centers within the Yunatsite culture are in the Upper Maritsa valley (Yunatsite, Ognyanovo), Middle Maritsa valley/Lower Stryama (Plovdiv-Nebet Tepe, Manole) and Upper Stryama valleys (Dubene-Sarovka). Recent research developments lead us to believe that there were possibly also hierarchical settlement interrelations within which Plovdiv-Nebet Tepe developed as a main political center because of his key position on the crossroads from the Upper to Lower Maritsa valley (and further to Kirklareli-Troy), and from the Upper Stryama to the Rhodope communication road going further to the Northern Aegean (Sitagroi-Thasos-Poliochni-the Cyclades).

The Early Bronze Yunatsite multilevel settlement (a tell) was found in later fourth millennium BCE (Nikolova, 1999b). Most probably, the earliest Early Bronze houses

were built according to this preliminary plan. In the excavated half of the tell the houses from the earliest settlements were documented as built in an arch that is possibly a part of a circle-like settlement plan, with houses close each to other or even possessing a common wall with an open space in the center. Such planning was known in Anatolia (Demircihuyuk) and it indicates the similarity in architecture between Yunatsite culture and the Early Anatolian culture beginning from the later fourth millennium cal BCE. It is interesting there are missing apses houses in the earliest level(s).

At Yunatsite the circle-like settlement plan was consequently followed during the renovations of the settlements, but because only preliminary information is currently available, it is still unclear what the inner evolution of the micro-settlement structures was like. For now we know that for the later period of its occupation well-preserved plans of houses are missing. The dynamic of the Yunatsite tell settlement life is partially confirmed by the development of the settlement beyond the borders of the tell in westward direction (based upon personal observations). This could be the result of the increasing of the population on the tell or it may speak of a real differentiation of the function of the settlement space and the development of social stratification.

How settlement structures relate to social development and evolution is hard to evaluate since the settlement inventory is still unpublished. During our participation in the excavations a storage building was found in one of the earliest horizons that was completely burnt while burnt ears and grain were preserved on the floor. With this in mind we may consider house complexes and the differentiation of the function of houses in the prehistoric village. Two village adult inhumations are exceptions from the earliest Early Bronze Age phase of occupation (see below).

Ognyanovo, Plovdiv-Nebet Tepe and Manole provide another body of incomplete evidence about the Yunatsite culture settlement structure in the Maritsa basin (Nikolova, 1999a, 2000b). It is important to point out the position of the settlement of Plovdiv-Nebet Tepe, which was founded on one of the hills (Nebet Tepe) overlooking the Maritsa River. We believe the latter was one of the main communication routes in prehistory in Thrace, connecting Thrace with the Northern Aegean and thus indirectly with Anatolia. Comparing the available data, one may presume that the location of the Plovdiv-Nebet Tepe itself indicates a special social and political function of this site during the Early Bronze Age.

One of the recently excavated prehistoric settlements in Western Thrace is Dubene-Sarovka in the Upper Stryama valley (Nikolova, 1999a, 1999b, 2000b, 2000b). The Stryama River (which is different from the Struma River in Southwest Bulgaria) was possibly (together with Suzlijka and Topolnitsa) in a second group of importance in Thrace after the primary communication functions of the Maritsa and the Toundzha Rivers. The Stryama empties into the Maritsa River to the east of Plovdiv, so on the condition that river communications were used mainly to connect the Karlovo Lowland and the population from the middle Maritsa valley, one would have reached

the Maritsa first and then returned in western direction against the stream of the Maritsa to arrive at Plovdiv-Nebet Tepe.

The tell of Dubene-Sarovka was damaged for a long period by agricultural activities, so the relatively stable cultural levels were documented simply from the depth of about 0.60 m (Dubene-Satrovka IIB2, Early Bronze II). Pottery indicates there were also completely destroyed cultural levels that belonged to Early Bronze III. Among the building structures, the Apses house are of special importance: No. 1 (about 12 m in length and 5 m in width), was discovered in the northern central part of the excavated area (Nikolova, 2005-2006). The structure was entirely highly burnt and a few finds on the floor indicated that most of the inventory was removed before it was burnt. Although there were many vessels missing from those left in the house, among those that were documented was a round-bottom cup together with spindle whorls, a stone axe and fragmented pottery. An investigation of the house revealed that there were several fireplaces—they were built in the southern part of the house that was destroyed at certain point. On the north, however in the apses part, there was one destroyed hearth and one almost completely preserved by the excavations. A short wall connecting the ends of the apses indicated also a possibly long period of renovations and reconstruction of this house and even the possibility that the house was initially constructed rectangular in plan with the apses portion attached at later point. Next to it was another apses house while to the north of Apses house No. 1 it was documented that there was a storage building that possibly indicated a big household complex.

The discovered apses houses at Dubene-Sarovka together with channeled pottery from Early Bronze I and the encrusted pottery from Early Bronze II actualize the problem of the origin of the apses houses in the Northwest Balkans (e.g. Vučedol-Gradac and Sarvaš). They were initially attributed to the Baden culture, but after reconsidering the stratigraphy it was concluded that they belonged to the Kostolac culture (Tasić, 1995: 62). Unlike in Thrace (i.e. Ezero), data for the apses houses from the Northwest Balkans is not numerous and it might indicate that in the latter region they were followed common standards by wealthy people. It is even possible that in the Northwest Balkans the apses-houses were distributed under the Yunatsite direct or indirect influence (through Pernik culture). Now, when we know more about the Early Bronze I and Early Bronze II in terms of the strong interconnection of the ceramic styles in the Northwest Balkans, Central Balkans and the Northern Aegean (Sitagroi, Dikili Tash and to the south the island of Thasos), the interactions in the architecture appear logical. It is even possible that, at least at the beginning, the apses houses were a sign of social status, which was later distributed more widely as an imitation of elite traditions, or an elaboration of common community standards. However, we need to keep in mind in case of Dubene where the apses was slightly turned to northwest. That may also indicate a functional purpose of buildings with an apse against the strong winds.

It should be pointed out that the similarity in the architecture coincides with the similarity in the pottery within Early Bronze II Yunatsite-Pernik-Ostikovac-Kostolac/Vučedol horizon (Nikolova, 2000b).

In light of the above data, the Yunatsite culture represents certain characteristics of a settlement structure that could be included in social models of advanced complexity:

1. A system of interrelated settlements with central places in the different micro regions;
2. A possible macro regional central place (Plovdiv-Nebet Tepe) and several long-term micro regional centers (Yunatsite (EB I-III), Ognyanovo (EB I-III), Manole (EB III), Dubene-Sarovka (EB I-III) that functioned as relatively independent political systems;
3. A dynamic micro-settlement structure including possibly distinguishable houses and house complexes related to the local elite.

We also suggested in the instance of the apses-houses from the Balkans that the architecture possibly reflected external contacts as an imitation of the elite house complexes from the Aegean or following common standards in the different interrelated macro regions.

To expand the conclusions drawn above we will turn to the evidence of the metal finds from the Yunatsite culture.

Silver earrings were discovered in one of the above-mentioned burials from Yunatsite. They are one of the earliest instances of silver jewelry in the Balkans and they most probably functioned as status adornments. In this case the cult of the dead overlapped with the ancestor in the village as a social reproduction strategy of the Yunatsite community to enhance the enculturation process by including the ancestor cult in the everyday social life of the community. The archetype of this model was present since the Early Neolithic although in the case of Yunatsite the high social status of the buried is represented expressively by the earrings.

Silver earrings are known to have been found indifferent graves of the Pit Grave Culture in the Balkans, but in Yunatsite they are possibly some of the earliest in the Balkans that dated from the later fourth millennium cal BCE. At Yunatsite, during earlier excavations a golden earring was discovered. As a rule, adornments from precious metals are an exception in prehistoric Balkan villages (e.g. Late Copper Age Hotnitsa tell).

It is worth mentioning that there are is not a lot of data about metal finds from the Yunatsite tell. A shaft-hole axe (Nikolova, 1999a) dated from about the mid of the third millennium cal BCE is one of the rare Early Bronze metal finds from this micro region in the Topolnitsa basin.

The situation in the upper Stryama valley seems to be different. A lead bronze flange-axe was discovered at Dubene-Sarovka (EB II-III). A small piece of a possible waste material from the same village consists of a high percent of lead that may

indicate the Dubene-Sarovka was a local center of production of metal finds (see details in Nikolova 2002). Recently golden adornments were found about 200m north-northeast from the Early Bronze village of Dubene-Sarovka, in the locality of Borunov Gorun where the cemetery of the village was located.

The proposition that the prosperity of Dubene-Sarovka indicated a flourishing cultural center in the Early Bronze Balkans, the newly discovered metal golden finds at Dubene-Balinov Gorun supported this cultural model, as well as our assumption that the Yunatsite culture from Early Bronze II-III possibly represents a model of an incipient chiefdom in the Balkans.

The silver, gold and lead bronze finds are evidence that points to the developed social complexity in the Yunatsite culture that advanced exclusively based on external contacts. While the shape of the flange-axe connects Dubene-Sarovka with the common type that was well-distributed in Central Europe, the tradition of the lead bronze is possibly correlative to Aegean metallurgy and even represents an Aegean influence and steady trade contact because of the lead imported from South. The archaeology of the island (Broodbank, 2000) may provide more evidence in the future.

Silver and gold adornments were widely distributed during the Early Bronze in the Balkans and united culturally vast regions including the North Black Sea Steppe (silver area only), the Carpathians, the Aegean and Anatolia. For the time being it is unclear whether the silver earrings and the gold objects from Yunatsite and Dubene were imports or whether they were locally produced as a means of expressing social status following Balkan-Aegean-Anatolian standards and indicating external contacts. The recently increased interest in the placer gold in Bulgaria may clarify the problem. At the same type the typological similarity of some of the beads that connect Troy, Poliochni, Levkas, Dubene, Rupite and other sites from the Balkans, the Aegean and Anatolia should be stressed.

The multi-aspect of the external contacts of the Yunatsite culture are especially represented by the Early Bronze I channel and Early Bronze II encrusted pottery (Nikolova, 1996; 1999a, 2000b). In both cases analogies spread to the south in the Northern Aegean and to the west as far as the Middle Danube. During the Early Bronze II encrusted pottery reached the island of Thasos where recently there were also ancient traces of metal activities discovered. Vučedol is another well-documented center of metal activity. Consequently, we can conclude that the distribution of common pottery and metallurgy and metal finds were interrelated during the Early Bronze II and that they both contributed to stabilization of the Balkan region, the development of enduring and steady external contacts and the political evolution toward incipient chiefdom as well as an opportunity for a balance of the social stratification. We can presume purposeful, controlled and organized external relations that underlined and stimulated the development of social complexity.

Burial customs of the Yunatsite culture were almost unknown until recently. The only evidence was from the Ognyanovo tell about a cremation burial. The Yunatsite tell provided data about two types of settlement burials: exceptional burials of adults

from the earliest levels and burials of babies in urn or other types of vessels typical also to earlier levels.

This year for the first time evidence about the extramural burial customs of the Yunatsite culture was obtained. Unfortunately, this preliminary information is incomplete and many events related to this discovery have indicated that the terrain record would most probably not be a reliable source for information on which to base any serious scientific conclusions. According to my personal instant observations, there are stone structures that occur at different levels, some of them probably covered by small tumuli. It is unclear whether the gold ornaments present were ritually buried or whether they were connected with cremations.

Despite the settlement burials that were popular in the Balkans including the Baden culture, the comparison of this ritual indicates that the ritual of urn burials of babies was specifically developed at Yunatsite. This is different than at Ezero, for instance, where babies' burials occurred a little bit later than at Yunatsite and there are also several inhumations of adults (Nikolova, 1999a). The ritual at the Yunatsite tell is similar to Sitagroi V and it is one more common element of the cultures of the communities that were divided by the huge mountain barrier of the Rhodope Mountains. The last was obviously easily accessible and it was used as a regular cross-mountain communication route.

Unfortunately, we still do not know the settlement patterns in Southwest Bulgaria for a more detailed comparative analysis. The burial customs of the Rupite where Early Bronze many metal objects were discovered including those made from bronze, silver and gold are unclear but the metal evidence may relate to the data from Dubene. It is worth mentioning that the finds donated to the National Museum of History from placer deposits in Western Bulgaria (Tsintsov, 2000) included Early Bronze Age jewelry that prove existed local gold mining and manufacturing.

Yunatsite culture is an archaeological concept. This means that it has come to define as a cultural whole sites that are regionally interrelated by accessible communication routes and which presumably interacted at different levels over time that resulted in a similar material culture. If introducing the concept of chiefdom exists within the same theoretical construct, its similarity to material culture would be explained with the existent idea about a common social identity for the communities from the Upper Stryama valley, and the middle and upper Maritsa valley.

The position of Dubene in a relatively closed social space, as along with its subsistence resources and obviously talented leaders and brave community made the Upper Stryama valley a flourishing cultural center during the Early Bronze. The direct communication water route connected Dubene with Plovdiv-Nebet Tepe which in turn controlled the contacts of the Upper Stryama further to the south and southeast. However, relatively dependable in its communication with South, the population of the Upper Stryama valley developed active social interactions to the west with the Pernik Group and even to the north through the Stara Planina Mountains with Coțofeni culture.

Recent data indicates that in the Struma valley (the Pernik culture) developed extremely prosperous communities known for now only from fragmented data from Kovachevo, Pernik and two gold treasures from looted cemeteries. It is one of the reasons to believe that Dubene communities acted in their multi-scale social contacts as a member of a bigger social group including also the upper Maritsa valley (Plovdiv-Nebet Tepe-Yunatsite). It is worth mentioning the strong similarity between the encrusted pottery in the Central Balkans (Pernik-Dubene-Plovdiv-Yunatsite-Sitagroi/Dikili Tash) within about 500 years that clearly indicates a stable prosperous social system with multi-scale interregional contacts.

At the first level are contacts based on common rituals and household contacts at an everyday or marriage alliance base. They could be contacts between relatives or future relatives since the similarity of pottery very often indicates cross-marriages. We believe that within the Yunatsite culture both endogamous and exogamous marriages had been practiced as early as since the Early Neolithic. The Upper Stryama valley had a specific affinity towards Western Bulgarian cultures despite the mountain barrier, while the easiest communication routes were through the Stryama valley. It is unclear to what extent all contacts were status contacts; in other words what was the existent scale of the social hierarchy in the different communities and how great was the opportunity of crossing the different social levels through marriage, religious membership or other social membership.

According to the ethnographic data, the bride price was an essential issue in the everyday lives of the communities. We believe that in the Yunatsite culture and in the Balkans as a whole, livestock was of primary importance. To this resource we can also add textiles, pottery, perishable adornments, etc. This probably explains the dynamic contacts through the Western Sredna Gora Mountains, that were probably very often the contacts of stockbreeders.

The ceramic data and the most recent data about metallurgy and metal finds (see above) clearly indicates that the social prosperity of the local community was a result of interregional interrelations. In other words, interregional interactions were a means towards stability and increased the social stability and prosperity. If one wants to modernize the Prehistory, probably trade would be placed as a leading factor, but this modernization misses the fact that in this traditional culture exchanges were incorporated into complex social contacts. Another pitfall of modern historiography is to relate all archaeological data to status and social stratification. But the status archaeology which is based mostly on cemetery archaeology in most cases offers static and imaginary models. If it is believed that in the grave (as a transition ritual bridge) the other world will be reproduced, then the rich will be buried with his/her status attributes, while the poor will be honored with a standard burial gift (pottery).

This methodology not only excludes the clothes and other perishable objects which were of primary importance in the prehistoric everydayness (textiles were traded in the Mediterranean), but it also ignores the fact that burials were a part of the

enculturation processes. In this last process the grave incorporates the idea of the cult of the dead and the cult of the ancestors together with the destiny of the descendant. It is obvious that the whole or at least a part of the social attributes of the deceased could be handed down as an enculturation transmission for the descendants and since the descendants served the ancestors, the high social status of the deceased would not be represented by the objects in the graves but by his/her descendant. From a psychological point of view there was never a break in the ancestor-descendant communication chain. We believe that when many extraordinary objects were deposited in the grave, it was not a representation of the high social status in the transition only to the other world. This respect through the deposited rich finds was expressed when there was a surplus in the given households or when there was a death of a young person, or in the case of some critical situations as a gift to the Mother-Earth. This explains the richness of some children burials.

It is impossible to test the above theory against the Yunatsite cultural data because of the fragmented archaeological data. But what we know for certain is that the rich and poor lived together in villages and their social status was most probably masked by solidarity ideology and common cults and rituals. Exercising the principle of solidarity was a very important strategy of the Early Bronze communities in which the chief most probably had to gain his status by reproducing not a power, but the ability to defend and to serve the communities. One of these strategies probably included the competitive ideology between the different communities at different scale.

“ME/WE-THEY” had a variety of dimensions:

“Me-he/she” (gender, age and status difference)

Our household-the neighbor household-the household of the neighbor village-the household from the distant village that is related by kinship-the household of the strangers

Our lineage-the other lineage (at different scale)

Our village-the other village (at different scale)

Our community (our tribe)-the other community (the other tribe), etc. more complex or transition levels.

The scale of the social identity could enrich smaller or bigger territory and it probably had a dynamic character. We believe that the enculturation strategy of social stability was a combination of regionalism and of intensive interregional contacts. Based on this competitive ideology, the chiefs, and related to them, their families were able to elaborate a non-competitive idea of an imitation of the famous partners. Based on this they were accepted in the village not as wealthy but as a village representative of “OUR”, in our words or with a specific village identity. The rich individual was accepted as a prestige for the whole community. In other words, there was an everyday exercise of the integration function of the complexity and wealth had an integration and not just a disintegration function.

We will illustrate our theory with data from the Early Bronze gold objects that gradually increased during the last decades.

While Troy was the leading center in the Balkan-Aegean world during the Early Bronze II-III (the third millennium cal BCE) and was possible the mega-center of elite jewelry (İşin E. (ed.) 2002 ; Tolstikov & Treister, 1996), the newly increasing data on gold, silver and other luxury objects from the Balkans in the third millennium clearly indicates that Troy stimulated the increasing social complexity in the Balkans. The newly emerged centers, which were in close direct or indirect relations with Troy were active communication partners in the Anatolian-Aegean-Balkan network, which was in turn a key chain element in the first Eurasian gold horizon dated from the third millennium cal BCE (Figure 7.6).

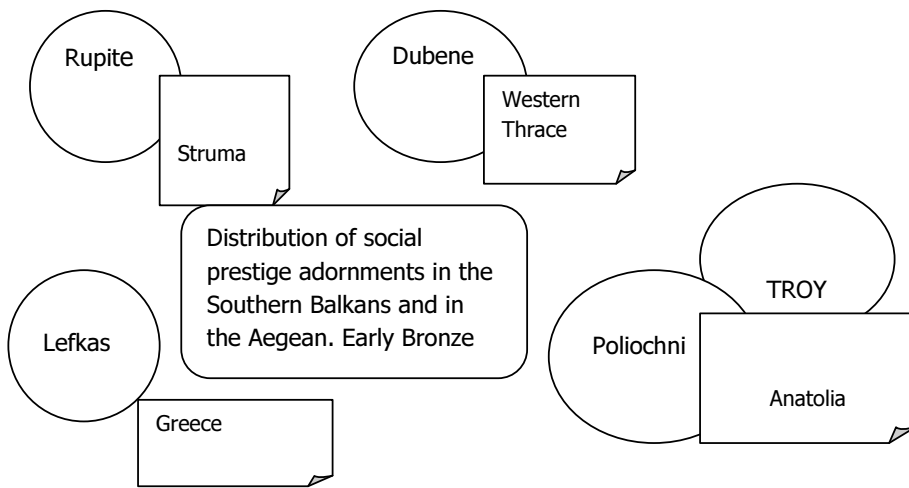


Figure 7.6: Western part of the second gold global horizon in Eurasia (3rd Millennium Cal BCE).

In prospective plans, the changes in later Early Bronze III—from the beginning of the Middle Bronze Age in the Eastern Mediterranean and generally in Eurasia also include Thrace and can be defined as a problem of the disappearance of the tells and gradual decreasing of the archaeological records. The treasuring of the gold (Dubene, Rupite etc.) may be also used as an argument for some signs of initial crisis. However, in our opinion, it was most probably towards the end of the third millennium cal BCE, as a result of a complex of reasons (problems of the adequate social strategies of reproduction including accumulation of social conflicts, as well as a cyclical climatic fluctuation, soil exhaustion, etc.) like in other prehistoric periods (Late Neolithic, Final Copper Age), that the Thracian population, in particular the Yunatsite culture, changed their strategy towards a more mobile way of life with the development of pastoral semi-sedentary or semi-mobile social groups, which usually is difficult to

documented archaeologically. This is the way in which we know the earliest Thracians from the written records.

In this contribution, based on settlement, metal, and ceramic data and burial data from the area of the Yunatsite culture in Western Thrace we attempted to determine some interrelationships between the social complexity, enculturation and external cultural contacts in the Balkans during the Early Bronze Age. All of these components of the prehistoric cultural process contributed considerably towards increasing the secure social status not only of given individuals but of whole community.

In terms of the evolutionary development of the social complexity and its controversial character in Balkan prehistory, this archaeological and anthropological approach points to the hypothesis that the external contacts of the Bronze Age communities in the Balkans played an essential role in the process of enculturation and for producing, reproducing and developing a social complexity towards initial chiefdoms in the Balkans, respectively increasing the secure status of individuals and whole communities. Wealthy people from western Upper Thrace were possibly in direct contact with wealthy Aegean and Anatolian leaders and/or traders, while in the social context of the Balkans specific strategies of integration and leadership developed that determined the Balkans as a model of chiefdom in the Early Bronze Age. In other words, it was still the time when the rich and the poor lived together the gold was sacred.

7.5 Conclusive Summary

This research demonstrates the benefit of thinking about social status as a complex and dynamic characteristic of human society. The prehistoric period is the stage of the evolution of the sociality and of the emergence of concepts of secure and unsecure (vulnerable) statuses. The focus in this research has been on secure status as a new topic that requires a most detailed consideration of the core records. It is a question that requires further research to enrich the gallery of secure status criteria and to reveal the aspects of unsecure social status.

The current theoretical achievement includes but is not limited to a determination of a typology of social statuses, differentiating between social position and social status, and defining a new type, that is secure and unsecure social statuses not only of individuals but of whole communities.

In the context of Balkan prehistory the cultural parameters of a secure status can be traced in sedentary and mobile subsistence pattern and life-styles, in the accumulation of wealth and the innovative research of health in prehistory, as well in whole systems of cultural development as the Yunatsite culture case study showed.

The current stage of the development of complex social knowledge requires training specialists not in a certain field of the social sciences but rather on specific topics through cross-disciplinary research. This sociological approach to social status

combines records and research in the fields of archaeology, cultural anthropology, theoretical sociology, psychology, medical anthropology, physical anthropology, ancient history, art history, etc. Although it is accepted that sociology does not have a high scientific status, it is the only discipline that provides scholarly approaches to society as a social system. Expanding the methodology of research may assist considerable progress of human knowledge in the direction of creating a real adequate picture of human society.

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Cristian Schuster and Alexandru Morintz

8 The Bronze and Early Iron Age Settlements in Romanian Dobroudja

8.1 The Early Bronze Age

After relatively intense studies there is still not a complete knowledge about the Early Bronze Age on the territory between the Danube and the Black Sea (Schuster 1999; Nikolova 1999). A series of specialists have tried to establish a chronology; among them, lately is the work of Ion Vasiliu that should be considered.

The large majority of conclusions about this time period are based upon funerary finds. There is almost nothing known concerning the settlements. Some of the discoveries assigned or assignable to the Early Bronze Age are artifacts, especially made of metal, stone, or horn/bone which, at least in part, come from settlements (see List A): Bădila, Calfa, Cheia-*Chiriște*, Cochirleni, Crucea, Gârlica, Grădina, Izvoarele, Luncavița-*La Cioara*, Luncavița-*Șase Izvoare*, Mahmudia, Negureni, Ovidiu, Parcheș, Sarichioi-*La Bursuci*, Târgușor, Topraisar, Tuzla, somewhere in Northern Dobroudja (Lăzurcă 1977: 301 f.; 1984: 282, 287 f.; Oberländer, Oberländer-Tîrnoveanu 1979; Hașotti 1985: 8 f.; Munteanu 1991: 410, 413; Vasiliu 1996a: 9 f., 12-17; Vasiliu 1996b: 27 ff. with earlier literature; Irimia 2003: 253 f., 257 f.

Taking into account those studies mentioned above, regarding the Early Bronze Age in Dobroudja, this paper is dedicated to tackling this topic of funerary finds.

8.2 The Middle and Late Bronze Age: The Coslogeni Culture

8.2.1 The Range

The Coslogeni Culture, part of the larger complex Sabatinovka-Noua-Coslogeni (Morintz 1977: 23 ff.; 1978: 158; Neagu 1993; Munteanu 1996; Gerškovič 1998; Koppenhöfer 2002; etc.), has been called by some authors the Valikovaya Culture (Černych 1992; Lichardus/Vladár 1996), has mostly covered South-Eastern Romania, namely Dobroudja and South-Eastern Muntenia up to Mostiștea Valley, reaching up to the Danube, even to Frătești-*Olreasa* (Giurgiu County) (Isăcescu and Burlacu 1978: 46-47; Schuster, Popa 2000: 146) and even further, to Zimnicea (Morintz 1978: 121 f. and fig. 60; Neagu 1993: pl. I; Petrescu-Dîmbovița 2001: 285). There are also sporadically finds west of it, especially in the area where the Argeș river flows into the Danube (i. E. Căscioarele, Zimnicea; Morintz 1978: fig. 60; Petrescu-Dîmbovița 2002: 173). Vestiges of this culture have also been found in Bulgaria: Tutrakan, Russe, Novgrad, Preslavtsi, Kadakkioi, Vasil Levski, Essenitsa, Yagnilovo, Durankulak (Alexandrov, Sirakov,

Petkov, Gajdarska 1998: 15 ff., with earlier literature and fig. 5/13-21). It also concerns the case of the find from Drama-*Kajrjaka* and its wheel-made ceramics (Lichardus 2002: 18 f.).

Additionally at Sava, there was an idol with good analogies (László 1997b: 123) found in a possible cult construction belonging to the Yagnilo-Coslogeni-Noua complex (Tončeva 1985; 1991) in the Noua milieu (Nicoleni, Noua I phase) and also at Troy VIIb.

What is often called “*Handmade Burnished Ware*”, “*Coarse Ware*” or/and “*Barbarian Pottery*”, was identified in the Greece of the Late Helladic IIIC phase at Athens, Delphi, Aigeira, Perati, Micene, Lefkandi, Tiryns, Sparta-*Menelaion*, Karakou, Pellana, Teichos Dymaeon, Kalopodi, Kastanas-*strata 14b-12*, in Crete, at Komnos and Chania, in Cyprus and up to Anatolia (Troy VIIb1) (Rutter 1975; 1990; Catling and Catling 1981; Hänsel 1982: fig. 1; Hochstetter 1982: fig. 9; Harding 1984; French 1989; László 1997b: 118 ff.; 1999: 29-30; Koppenhöfer 1997-with earlier literature; 2002: 702 and fig. 1-3; Schuster, Popa 2000: 134), should be considered, with a high probability, to be Coslogeni ceramics. The occurrence of this kind of ceramics is not accidental, but, as stated before, it was a process of the “*Balkanizing*” of Greece and some parts of Asia Minor, determined by a population’s movement coming from the north, possibly Thracian people-Phrygians, Mysians (László 1997b: 125; 1998: 44). Even if some specialists have in the past only discussed imports (Harding 1984: 222 f.), today, it is evident that what we are studying was a population intrusion (Rutter 1975: 17, 29 f.; French E. B., Rutter J. B 1977; Catling and Catling 1981: 74, 82; French 1989: 48). It is possible that some part of the respective communities have been involved in the “*movement of the Sea Peoples*” (Kločko 1990; 1993a; 1993b: did not mention this aspect; László 1997b: 123).

Besides the settlements in Muntenia mentioned by Sebastian Morintz (1978: 122 ff. and fig. 60), those at Bucu, Axintele, Giurgeni-Mozacu, Pietroiu, Ruseți, Unirea, Vărăști (Ialomița County; Florescu 1991: 151 ff. and fig. 85/2; Păunescu, Rența 1993), Călărași-*Grădiște*a (Călărași County; Florescu 1991: 154) should also be mentioned. The study of the Coslogeni finds from Dobroudja (see List B) shows that they were usually located in an area rich in water resources, on the Danube or on lake banks, situated not far from the Black Sea shore.

8.2.2 The Origin

Marian Neagu (1993) has recently approached the history of this research with great care. Consequently, we will not elaborate on it further, yet here we will point out that Sebastian Morintz, the one who defined the discussed manifestation (Morintz and Anghelescu 1970; Morintz 1978: 121 ff.; see also Hänsel 1976), tried to identify the roots of this culture in the regions east of the Dniepr; roots that would be the same as those for the Sabatinovka Culture (Morintz 1978: 121, 157 f.). The occurrence of these two

manifestations on Romanian territories must be connected, according to Sebastian Morintz, a fact that is also stressed by Marian Neagu (1993: 168 f.), with population movements that started from the Volga-Don and Dnieper-Danube areas. However, the local stock should not be neglected, but its eastern essence should also be recognized (Cavruc 1993: 90; Petrescu-Dîmbovița 2002: 173).

8.2.3 The Evolution

It seems that the Coslogeni Culture independently evolved from not only the Sabatinovka Culture, but also from the Noua one (Morintz 1978: 158). Still, its evolution did not occur in a uniform manner across its scope. For Dobroudja, for instance, its final evolution never reached the levels detected in Muntenia or Bulgaria (Morintz 1978: 151 f.; Petrescu-Dîmbovița 2002: 173).

It is generally accepted that the Coslogeni Culture developed on three phases (Morintz 1978; Petrescu-Dîmbovița 2002: 173) and the finds from Radovanu are included into the final one. Today, it is evident that this site (Morintz, Șerbănescu 1985), like the others in the territory of Romania (i.e. Daia-Fântâna Mare, Giurgiu County) (Isăcescu and Burlacu 1978: 53; Schuster, Popa 2000: 145), and Northern Bulgaria, are special cultural occurrences (see, among others, Schuster 1996: 147 and fig. 1; 2003: 125; Palincaș 1999; Morintz, Schuster 2004: 50 f.).

The first Coslogeni stage is presumed to correspond to the Tei V phase; this assumption is based on some finds of ceramic fragments from that moment (?) in the first Coslogeni *stratum* from the eponymic settlement (Neagu, Nanu 1990: 124). In turn, S. Morintz (1990b: 134) considers that the last Tei phase (V) is contemporary with it only during the Radovanu Culture.

Other specialists see a relationship between the final Tei III and the first Coslogeni phase (Schuster 1993: 200 ff.; 1995: 84; 1997: 133; Leahu 1997; 2003: 188; Schuster, Popa 2000: 133 f.). It is possible that the connection of the first phase of the Coslogeni Culture may have already been established towards the end of the Tei II “*moment*”.

In Dobroudja, but also in Eastern Muntenia, on the Danube, some Coslogeni ceramic fragments were found, in several sites of the Babadag (I) Culture, : Satu Nou-Valea lui Voicu, Garvăn-Mlăjițul Florilor, Gârlița, Bugeac, Rasova-Malul Roșu, Murighiol-Ghiolul Pietrei, Beidaud, Pietroiu, Siliștea-Nazâru, Siliștea-Popină, Stelnica-Grădiștea Mare, Bucu (Cârjan 1969: 129 f. and figs. 25-28; Irimia 1974: 81 ff.; 1981c: 353 ff., 363, 366 and figs. 4/2-3, 5-6, 5/1-7, 11; 1996: 291 f.; 2002: 139 f.; Simion, Lăzurcă 1980; Irimia, Conovici 1989: 115 f.; 1990: 81 ff.; Simion 1989: 216; 2001: 317 and pl. II/11, III; 2003a: 64 f. and pl. 2/11, 3; 2003b: 79 ff. and fig. 6; Harțușche, Silivestru 1992: 17; Păunescu, Rența 1993: 193 ff.; Sîrbu, Pandrea 1994: 27 ff.; Jugănar 1996b: 294; 1997a; 1997b; Conovici, Matei 2001: 99 f.).

Over the years, several researchers have studied the Coslogeni Culture on the territory of Bulgaria and especially the one in the coastal region and the so-called

“*Black Sea variant*” (Toncheva 1972: 310 f.; 1977: 163; 1978; Todorova 1982: 417-425). The searches at Tutrakan have revealed both analogies with Coslogeni settlements from Muntenia (Ulmu, Dorobanțu, Lupșanu, Călărași, Grădiștea-*Coslogeni*, Andolina, Crăsani) and from Dobroudja (Gârlița, Ghindărești, Hârșova), but also with the Radovanu Culture (Alexandrov, Sirakov, Petkov, Gajdarska 1998: 16 f.).

8.2.4 The Habitats

Even if the finds in the whole Coslogeni range are not very spectacular, there are many known things that concern human habitats so, today, we cannot say that the above-mentioned culture is known only by its ceramics (Koppenhöfer 2002: 687).

8.2.4.1 The Settlements

8.2.4.1.1 The Types of Settlements

1. Cinderers (Zolniki): Some settlements shaped as cinderers (zolniki) (Petrescu-Dîmbovița 2001: 285) were identified. Out of these, for Dobroudja, those 10 (?) discovered at Stejaru can be mentioned (Morintz and Anghelescu 1970: 403; Morintz 1978: 143; Florescu 1991: 152). Cinderers have been also detected in Muntenia, at Andolina (Morintz, Anghelescu 1970: 381 ff.; Morintz 1978: 124; Florescu 1991: 146), Grădiștea-*Coslogeni* (Morintz, Anghelescu 1970: 375 ff.; Morintz 1978: 122; Florescu 1991: 147 f.), Crăsani (Morintz, Anghelescu 1970: 398 ff.; Morintz 1978: 122; Florescu 1991: 148), Jegălia (?) (Morintz, Anghelescu 1970: 396; Morintz 1978: 122; Florescu 1991: 150), Lupșanu (Morintz, Anghelescu 1970: 398; Morintz 1978: 136-142; Florescu 1991: 150 f.), Ulmu (Morintz, Anghelescu 1970: 388 ff.; Morintz 1978: 126-136; Florescu 1991: 153 f.), Ștefan cel Mare (Cavruc, Cavruc 1995: 90 f.), Stelnica (Conovici, Matei 1999).

The cinderers from Stejaru have an average diameter of 30 m and a cultural layer 0.80 m thick (Morintz 1978: 143). At Lupșanu (Ialomița County) those 14 (?) cinderers have diameters between 30-40 m and heights between 0.40-0.80 m (Morintz 1978: 136). Those from Grădiștea-*Coslogeni* (Călărași County) were smaller (Morintz 1978: 122). At Ulmu (Călărași County), the settlement consisted of a mound, out of which about half was preserved (600 m²), the rest of it was crumbling into the Mostiștea Lake (Morintz 1978: 126). It appears that a mound existed also at Sultana (Călărași County), the settlement had a diameter of 70x80 m, and the largest quantity of material (a stratum of 0.50-0.60 m thick) was discovered in its center (Morintz 1978: 136). S. Morintz describes a rather large cinderer inside of which there were groups of habitation remains. The surface is covered by cinderers (?) at Crăsani (Ialomița County) extending about 300 m (Morintz, Anghelescu 1970: 398-400 and figs. 29-30; Morintz 1978: 122; Florescu 1991: 148 and fig. 90/2-7).

14 cinderers have been uncovered at Ștefan cel Mare (Călărași County) in the eastern part of the Jeglia Valley (Cavruc, Cavruc 1995: 90 f.). It is interesting that, between the cinderers, even where the cultural layer was thin, various habitation complexes and pits were detectible.

These kinds of “*constructions*” (cinderers) are of a certain eastern origin and they are considered in the Romanian archaeology to be an elevation; a kind of mound that is flattened and contains remnants of above-ground dwellings, namely adobe fragments, a lot of ash and wood charcoals (Chicideanu 1994: 280). This type of “*construction*” is characteristic of the Noua and possibly the Tei Cultures in eastern and central (Transylvania) Romania (Florescu 1991: 24 ff.; Andrițoiu, Vasiliev 1993: 102; Schuster, Popa 2001: *footnotes* 20 and 22; Petrescu-Dîmbovița 2002: 169; Schuster 2004: 308). The purpose behind raising the cinderers has generated divergent opinions among specialists (Neagu 1993: 171 f.; Petrescu-Dîmbovița 2002: 169). Some of them believe we are facing areas of domestic garbage or habitation sites (Schuster, Popa 2001: 28; Schuster 2004: 309), while others connect them with possible rituals (Levitskii, Sava 1993: 135 f.). The opinion of M. Neagu (1993: 172) should also not be ignored; he states that we have to take into account the possibility that these ash-pits would have changed their features and functions from one historical period to another.

It is interesting to take note here the Noua find at Gârbovăț where each of the five cinderers consisted of other smaller cinderers (Florescu, Rugină, Vicoveanu 1967: 76).

Based off of his own observations, E. Comșa (1991: 27 f.) forwarded an interesting hypothesis regarding the cinderers. He considered them to be the result of domestic deposits that were residual after a ritual cleaning that took place in the settlement. In time, the *strata* of their domestic deposits then raised a real mound, identical to those of the Coslogeni type in the Late Bronze Age.

According to S. Morintz (1978: 149), the cinderers were only in use during the first phase of the culture (Petrescu-Dîmbovița 2002: 174). Later on, in the second phase open or fortified settlements were raised and some of these even had large dimensions (Păunescu, Renca 1993: 194).

2. Open settlements: Adamclisi-*Platou Est* (Barnea, Barnea et al. 2004), Canlia (Morintz and Angelescu 1970: 402; Morintz 1978: 122 and fig. 60/12; Florescu 1991: 146; Simion 2001: pl. II/ 4; 2003a: pl. 2/4), all sites from the Constanța County, Enisala-*Palanca* (Morintz and Angelescu 1970: 403; Morintz 1978: 122 and fig. 60/4; Florescu 1991: 149; Simion 2001: pl. II/ 14; 2003a: pl. 2/14), Sarinasuf-*Fundea* (Morintz and Angelescu 1970: 404; Morintz 1978: 122 and fig. 60/3; Florescu 1991: 152; Simion 2001: pl. II/ 15; 2003a: pl. 2/15), both from the Tulcea County, etc.

We also found unfortified settlements situated outside Dobroudja, e.g. Stelnica-*Grădiște* (Ialomică County) (Conovici, Matei 2001: 99 f.).

8.2.4.1.2 The Location of the Settlements

In Dobroudja, the communities of the Coslogeni Culture chose the terraces of the Danube as a foundation space for their settlements; primarily those of some waters, either being interior running or still ones, and specifically the valleys that ran towards the water sources. Thus, the settlement at Enisala (Tulcea County) was located on the bank of the Razelm Lake, on the erosion witness called *Palanca* (Morintz, Angheliescu 1970: 403; Florescu 1991: 149). On a high promontory of the Bugeac Lake rests the location of the Gârlița site (Constanța County) (Morintz, Angheliescu 1970: 400; Florescu 1991: 149).

The settlement at Ghindărești (Tulcea County) was raised upon an erosion witness from the terrace of the Danube (Morintz, Angheliescu 1970: 402; Florescu 1991: 149). The Coslogeni remnants from Canlia are concentrated at the mouth of the valley bearing the same name (Morintz, Angheliescu 1970: 402; Morintz 1978: 122; Florescu 1991: 146).

The site where *Garvăn-Mlăjitul Florilor* was located was on a flat promontory, bordered to the south and east by the Jijia pond (Jugănaru 1997b: 103).

The settlement at Tutrakan-*Gyaur Punar*, from Southern Dobroudja, in Bulgaria, is located on a plateau raised about 80m above the river bed (Alexandrov, Sirakov, Petkov, Gajdarska 1998: 7).

Similar to Dobroudja and the other regions crossed by the Coslogeni communities, they exploited the environment concerning the location of the settlements. Of course, they preferred the vicinity of the Danube, but preference was also given to the interior rivers and lakes of Muntenia. The lower terrace of the Danube bears witness of the erosion where a community once settled, at Călărași-*Grădiștea* (Florescu 1991: 146). Also the bank of the Danube, in this case the Borcea branch, was also chosen for the site from Călărași-*Măgureni* (Morintz, Angheliescu 1970: 379 ff.; Morintz 1978: 122; Florescu 1991: 146). An erosion witness situated close to the Borcea branch revealed the chosen location for the settlement from Jegălia-*Delimani/Sărături* (Ialomița County) (Morintz, Angheliescu 1970: 396; Florescu 1978: 150). On the bank of the same branch are also located the Pietroiu, Stelnica and Rușeșites, all in the Ialomița County (Morintz, Angheliescu 1970: 396 f.; Florescu 1991: 151 f.; Conovici, Matei 1999).

The site at Ceacu (Ialomița County) was located on the bank of the Călărași Lake (Morintz, Angheliescu 1970: 395; Morintz 1978: 122; Florescu 1991: 147). The site at Dorobanțu (Ialomița County) held an excellent position on the bank of the natural channel *Bătrâna* that connected the Mostiștea and Boian lakes (Morintz, Angheliescu 1970: 385; Morintz 1978: 126; Florescu 1991: 148). The settlement from Potcoava (Ialomița County) (Morintz, Angheliescu 1970: 395; Florescu 1991: 151) was also established on the bank of a lake (or pond), in this case it was *Barza*. Another site, at Ulmu, was on the bank of the Mostiștea Lake, on the spot called *La Caraman* (Morintz, Angheliescu 1970: 388; Morintz 1978: 126 ff.; Florescu 1991: 153). At Gagu (Ilfov County), on the right bank of the Mostiștea Lake, a Coslogeni settlement was identified (Trohani 1986: 21).

Coslogeni habitation remains were also detected on the bank of the Gălățui Lake, at Rasa-*Cherhana* (Ialomița County) (Morintz, Angheliescu 1970: 395; Florescu 1991:

152). Additionally, some Coslogeni traces were found (Trohani 1986: 15) on the bank of the Corâta creek that flows into the Mostiștea Lake, at Codreni (Călărași County).

The bearers of culture also settled on islands, as the case of *Ostrovelul* from Căscioarele (Călărași County) (Morintz 1978: 122; Florescu 1991: 146 f.).

8.2.4.1.3 Size

There are large settlements that have been mentioned (Petrescu-Dîmbovica 2001: 285) that had characteristics that include several *strata* (Grădiștea Coslogeni; Neagu, Nanu 1986) and a stable character; but there are also others, that we could call “*seasonal*”, that were used by small groups with a fewer number of individuals and for a shorter period of time.

The cinderers at Stejaru (Morintz and Anghelescu 1970: 403; Morintz 1978: 143; Florescu 1991: 152) are scattered on a surface of 10 ha. Those at Ștefan cel Mare (Călărași County) (Cavruc, Cavruc 1996: 119) are situated in a space of 150.000 m². The site at Dorobanțu (Ialomița County) had as habitable surface an area of about 1000 m² (Morintz, Anghelescu 1970: 385; Morintz 1978: 126; Florescu 1991: 148). The cinderer at Grădiștea-Coslogeni has a diameter of about 40 m (Munteanu 1993: 48).

The open settlement at Tutrakan-Gyaur Punar covers a surface of 250x100 m (Alexandrov, Sirakov, Petkov, Gajdarska 1998: 7). For the large majority of the other sites from Dobroudja, the information we possess, indicates their existence for just a short period of time, insufficient for “*creating*” a *stratum*.

8.2.4.2 The Houses

8.2.4.2.1 Types of Houses

1. Pithouses: The remnants of a pithouse with a hearth were observed at Călărași-Măgureni (Călărași County; Morintz 1978: 124). Another possible pithouse, with a rectangular shape (2.5x3 m) and two cavity-compartments (1.00x1.25 m and 1.5x1.7 m) was investigated at Ștefan cel Mare (Călărași County) (Cavruc, Cavruc 1995: 90 f.).
2. Surface dwellings: At Crăsani (Ialomica County) the remains of a surface dwelling were identified (Morintz, Anghelescu 1970: 398 ff.). Some other possible surface dwellings with hearths were found at Dorobanțu (Călărași County) (Morintz 1978: 126). At Ștefan cel Mare (Călărași County) (Cavruc, Cavruc 1995: 90) the remnants of three light surface constructions were found. We should probably also mention that in the surface fittings there was a battered and well-smoothed clay floor with two layers of plaster (each with a thickness of 0.08-0.10 m) found at Siliștea (Neagu, Pandrea 1999: 51).

Surface construction from Tutrakan-Gyaur Punar, was probably a part of the economic activity (Alexandrov, Sirajkov, Petkov, Gajdarska 1998: 3 and fig. 1).

8.2.4.2.2 The Fire Installations

8.2.4.2.2.1 Hearths

1. In pithouses: Călărași-*Măgureni* (Călărași County) (Morintz 1978: 124).
2. In surface dwellings: Dorobanțu (?) (Călărași County) (Morintz 1978: 126), Grădiștea Coslogeni (*Hearth no. 9* comes from a possible dwelling) (Neagu, Nanu 1986: 104 and fig. 13/b; Schuster 2004: 315).

In addition to the hearths that appear in the surface dwellings and pithouses, there are also some cases of outdoor ones (Dorobanțu?, Călărași County; Morintz 1978: 126).

8.2.4.2.3 The Metallurgical Installations

The metallurgical installations found at Grădiștea Coslogeni (Neagu, Nanu 1986; Schuster 2004: 330) have precipitated many discussions, especially regarding their attribution to the Coslogeni Culture. A cohort of specialists in question reject that it belongs to the Late Bronze Age (Munteanu 1993: 49).

8.2.4.3 The Pits

8.2.4.3.1 Domestic and Storage Pits

Three bell-shaped pits were identified at Adamclisi-*Platou Est* (*Complexes no. 26, 32, 29/2003*), each with a diameter of about 2 m, that start from the depth of 0.60 m, 1.20 m, and 1.65 m. These included ceramics, bones, adobe, charcoals, stones, shells, slag? and a bronze tube in *Complex no. 26*) (Barnea et al. 2004: 17).

At Ștefan cel Mare (Călărași County) 20 domestic bell-shaped pits were investigated in 1994: they contained ash, ceramics, animal bones, adobe and slag (Cavruc, Cavruc 1995: 90-91). Some other 13, also bell-shaped, were studied in 1995 (diameter of the bottom 1.3-2 m, diameter of the mouth 1.00-1.34 m, the depth from the surface 1.2-1.8 m), of these, *no. 22* was the richest (Cavruc, Cavruc 1996: 119).

In 1998 the pit *C4GR* was investigated; it has a truncated shape (diameter of the bottom 1.40x2.60 m, diameter of the mouth 0.65 m, depth 0.65 m), on the bottom of which a compact layer of shells was found (*Unio sp.*, *Dreissena sp.*) (Neagu, Pandrea 1999: 51).

There are also pits at Stelnica (Ialomița County). In 1998 *pits nos. 84 and 85* were discovered; each of these has a truncated shape, with depths varying between 0.70/0.75 m and whose bottom diameter is 1.25-1.50 m (Conovici, Matei 1999: 111). Domestic pits were identified also at Tutrakan (*Pits No. 1 and 2*; Alexandrov, Sirakov, Petkov, Gajdarska 1998: 8, 10 and fig. 3-4).

8.2.4.3.2 Ritual Pits

Such pits have not yet been discovered in Dobroudja; however, one has been found in Muntenia, at Bucu (Rența 2002: 71).

8.3 The Iron Age. The Babadag Culture

8.3.1 The Range

A close look at the range of the Babadag Culture points out that its main area of distribution covers the space between the Danube and the Black Sea, that is the territory of Dobroudja (Morintz 1964: 116 f.; 1982: 62 ff.; 1987: 65 f.; Jugănaru 1996a: 31; 1997b: 103). Few sites with Babadag materials have been identified west of the river. The latter ones are mostly concentrated on the bank of the Danube or on the edges of the rivers that flow into it. Those that we will mention here include the settlements at Grădiștea Coslogeni (Călărași County; Babadag?; Neagu, Nanu 1986; Neagu 1989; Căvruc, Neagu 1995), situated in the Balta Ialomiței, between the proper Danube and the Borcea branch, Brăilița (Brăila County; Babadag I-II; Harțuche 1980b: 302, 312 f.; Harțuche, Anastasiu 1968: 29), Siliștea-Nazâru *Popină* (Brăila County; Babadag I-II; Harțuche, Silvestru 1992; Sîrbu, Pandrea 1994), Siliștea-*Conac* (Brăila County; Babadag I; Sîrbu, Pandrea 1994: 27 ff. and fig. 1/18-22), Vânători (Galați County; Babadag I; Brudiu 1981, 529 ff. and figs. 3-4), Spiru Haret (Brăila County; Babadag?; Harțuche 1980a: 366; 1980b: 333), Ijdileni-Frumușița (Galați County; Babadag II-III; Brudiu 1991), Piscu-*Cimitirul Vechi* (Galați County; Babadag II-III; Brudiu 1991), Țândărei (Ialomița County; Babadag II), Bucu (Ialomița County; Babadag I-II; Păunescu, Rența 1993; Rența 1999; 2002). Somewhat remote are the sites at Bălteni (Buzău County; Babadag I; Dragomir 1986; Morintz 1987: 62), Greaca-*La Slom* and *Valea Fântânilor*, Prundu-*La Stână* (Giurgiu County; Safta 1996: 8-10 and figs. 6/2, 8/3-4, 9; Schuster 1996: 148 and figs. 8-10) and Dridu (?). In the last case, there is a bronze deposit placed into a Babadag II vase (Enăchiuc 1987). However, the cultural assignment is erroneous, because it is actually a Mediaș type deposit. Moreover, this particular kind of cultural expression in ceramics are not rare for the Central Muntenia (finds at Coconi-*Piscu-Crăsani*, Gostilele, Preasna, Preasna Veche, Sultana-*Ghețarie*, Ulmu-*Puntul Piscicol*, Vlădiceasca; see Schuster 1996: 148 with earlier literature and figs. 2, 5/2).

Returning to Dobroudja, we have to point out here that the Babadag sites (see List C) cover areas rich in water, usually preferring the bank of the Danube to those of the Babadag, Razelm, or Sinoe lakes. The inner part of the province, with fewer permanent water sources, was largely avoided, with the exception being the find at Beidaud. The high terraces and promontories, some of which are today affected by erosion, were preferred places of settlement foundation. In most cases these settlements took advantage of the benefits of a location that offered a natural shelter against not only enemies, but also against the wild animals even though these settlements were

not endowed with fortification elements. Still, some of them, like those at Beidaud, Babadag, possibly Satu Nou-*Valea lui Voicu* had walls and ditches.

8.3.2 The Origin

It is generally considered that the Babadag culture was preceded by certain manifestations that contributed to its emergence. In this manner, Southern Moldova, North-Eastern Muntenia and Northern Dobroudja the group/phase Tămăoani were documented as developing at the beginning of the Iron Age (László 1986a; 1998b; 1997a; 1997b: 119; 1999: 30; 2001: 321 f.; Jugănaru 1997b). It is possible that the ceramics of the II group from Karakou (Greece) (László 1997b: 119-120) may also belong to this Pre-Babadag phase.

According to G. Jugănaru (1997b: 106), considering the study performed upon the materials at Garvăn-*Mlăjitul Florilor*, the mentioned group seems to have at least in part been contemporaneous with the Babadag I phase and with the Holercani group, the latter of which was from Bessarabia.

Also, according to S. Morintz (1978: 160), the Sihleanu aspect that existed in North-Eastern Muntenia (Anastasiu, Harțuche 1967; Harțuche 1972) is considered to have also preceded the Babadag Culture. This manifestation, connected with the Coslogeni, Monteoru and Noua cultures, which does not contain any element of the Hallstatt period, has become a component of the Babadag I phase.

8.3.3 The Evolution

As it has been already stated above, Coslogeni materials were seldom found at the Babadag I settlements from Dobroudja (Garvăn-*Mlăjitul Florilor*, Satu Nou) (Jugănaru 1995: 32; Irimia, Conovici 1995: 78; etc.), besides those ceramics of the respective phase. It is considered that the evolution of the Babadag Culture in Dobroudja began with the 9th century B. C. and goes along for three phases, up to the first half of the 7th century B. C. (Jugănaru 1996a: 31).

8.3.4 The Human Habitats

8.3.4.1 The Settlements

8.3.4.1.1 Location

Most of the settlements were established areas near the Danube. Some others are situated on the banks of some lakes, like Sinoe, Babadag or Razelm. It is evident that the locations were chosen according to the capacity the *Hinterland* that of ensuring

adequate supplies for the food necessities of the community. On the other hand, the water sources also played a significant role. These were largely the Danube and the lakes, but in some cases there were some springs that served this purpose, as was the case of the settlements in the Casimcea Highland in the inner Dobroudja, where springs offered these settlements proper living conditions.

8.3.4.1.2 Settlement Types

1. Open: The large majority of the settlements were **unfortified**, although many of them, by their positions were afforded natural protection. Those sites that were unfortified include: Cernavodă-*Dealul Sofia*, Niculițel-*Cornet*, Telița-*Amza*, Murighiol-*Ghiolul Pietrei*, Gura Canliei, Garvăn-*Mlăjițul Florilor* (Berciu, Morintz, Ionescu, Roman 1961; Irimia 1981; Lungu 1991; Topoleanu, Jugănar 1995; Baumann 1995; Jugănar 1997b). Open Babadag settlements were also investigated outside Dobroudja, at Siliștea-*Nazâru* (Brăila County) for instance (Harțuche, Silivestru 1992).
2. Fortified: In the Babadag cultural milieu, **fortifications** were also found. They are fewer in number, a fact which demonstrates that they had a special “*status*”; they were possibly “*administration centers*” that controlled a wider territory or they may have simply been the expression of some military convulsions and communities raised them in order to defend themselves from enemies-perhaps relatives and/or strangers.

The best known fortification is the eponymic one from Babadag. The investigations initiated there by Sebastian Morintz (1964: 102; 1971: 20; 1987: 39 ff. and fig. 4/5) and continued more recently by Mircea Munteanu and especially by Gabriel Jugănar, have showed that the southern side of the promontory where the fortification was raised, was equipped with a wave and a ditch. They have described a ditch with a width of 12-13 m on some segments and to a depth of 4.00-4.50 m. The wave raised on the edge of the slope was first covered with limestone slabs, then afterward with clay and they were finally burnt.

The fortification elements of the settlement (the precinct having a surface of 1.6 ha) were constructed during the Babadag III phase, according to the conclusions of Sebastian Morintz (1987: 44).

Another fortified settlement was studied at Beidaud (Simion, Lăzucă 1980, 43 ff. and pl. III, VI; Simion 2003b: 78 ff. and figs. 2/1-2, 3), where two waves were discovered, each of which were also equipped with a ditch. The first wave is 14 m thick at its base, it has an emblecton made of rock and clay boulders, with a considerable width of 7 m-that has been preserved, at a height of just 1.50 m. This precinct wall, paved with stones, has been burnt to red but, its upper part also contains many pieces of charcoal and ash, a fact that is indicative of a probable arson of what was possibly a palisade.

The wall is followed by a defending ditch, with a depth of 3.90 m with an opening at its “*mouth*” of 15 m and then by the second wall that at present has a height of 1.40 m, made of ground (from the ditch) and then paved with stones on its outside part.

In the category of fortified settlements there are also Satu Nou-*Valea lui Voicu* (Irimia, Conovici 1993), Gârlița (Morintz 1964, 106; Irimia 1974, 89), Orșova (Morintz 1964: 104 ff.) and most probably, Revărsarea-*Dealul Tichilești* (Simion 2003c: 98). This one is a fortified settlement of the “*blocked hill foot*” type.

Information is not always exact with regards to the size of the settlements. The precinct of the settlement from Beidaud covers 2.5 ha (Simion 2003b: 80). The fortification system indicated a longer habitation of the settlement. However, the same cannot be concluded in the case of Revărsarea-*Tichilești*, where an intense use of the settlement was not observable (Simion 2003c: 99).

Gabriel Jugănar (1993: 116-117) has pointed out the existence of the settlement categories for the Babadag Culture in Dobroudja: those with an early phase in which the habitation continued also in the later period (Babadag, Beidaud, Garvăn-*Mlăjițul Florilor*; etc.) and others, raised during the Babadag III phase, possibly as a result of a demographic growth. In this phase there are also intense fortification works noticeable at Beidaud and Babadag. These were maybe also connected with the intrusion into the Lower Danube region of the population from the Basarabi Culture. It does not exclude, however, the existence of real power centers in Dobroudja, around which small villages gravitated.

During the final part of the eighth century BC., the Babadag Culture faced an influx from Muntenia and Moldova, being mostly concentrated in Dobroudja (Jugănar 1996a: 31). Yet, the Basarabi communities did not cross the Danube; instead they established their own settlements (Muchia, Suțești, Poiana, Suceveni, Lunca etc.) or occupied the Babadag ones (Piscu-*Cimitirul Vechi*, Ijdileni-Frumușica). Basarabi I ceramics, as import pieces, have been found in Dobroudja at Rasova-*Malu Roșu*, Enisala, Histria, Babadag, Satu Nou, Hârșova, Revărsarea-*Dealul Tichilești* and *Cotul Tichilești* (Jugănar 1996a: 32, fig. II and Map 3).

8.3.4.1.3 Size

The exact dimensions of many sites remain a mystery due to the lack of a wide range investigations in this area. In the case of Garvăn-*Mlăjițul Florilor* settlement a surface of about 2.5 ha has been postulated (Jugănar 1995: 31). At Babadag, as previously mentioned, the dimensions we have are 1.6 ha, while at Beidaud they are 2.5 ha.

8.3.4.2 The Dwellings

8.3.4.2.1 Pithouses and Semi-Pithouses

The data we possess for this kind of construction are more substantial. We have to specify that pithouses are specific to all phases of the culture (Babadag, Cernavodă, Hârșova, Jurilovca-*Capul Dolojman* etc.) (Morintz 1964: 102; Morintz, Șerbănescu 1974: 47 ff.; Irimia 1974: 111; etc.). There is no clear differentiation concerning the depth and, connected to that, the type of underground construction: pithouse or semi-pithouse (Ciocea 1981: 57).

8.3.4.2.1.1 Shape

1. Oval: Garvăn-*Mlăjitul Florilor* (Jugănaru 1997b), Niculițel-*Cornet* (Topoleanu, Jugnar 1995: 203), Rasova-*Malul Roșu* (Irimia 1974: 87), Satu Nou-*Valea lui Voicu* (Irimia, Conovici 1993: 53 f., 96 and fig. 2), Telița-*Amza* (Baumann 1995: 20 and pl. II), Enisala-*Palanca* (Jugănaru, Ailincăi, Stănică 2004);
2. Rectangular with rounded corners: Argamum (Coja 1972: 33), Babadag (Morintz 1987: 45; Morintz, Jugănaru 1995: 181; Morintz, Jugănaru, Munteanu 1995: 223; Jugănaru, Ailinci, Morintz 2002: 46 f.), Murighiol-*Ghiolul Pietrei* (Lungu 1991: 66), Garvăn-*Mlăjitul Florilor* (Jugănaru 1995: 31).

8.3.4.2.1.2 Size

1. 5x4 m: *Dwelling 5* in *Tranch 2* from Revărs area-*Tichilești* (Simion 2003c: 101);
2. 5x3 m: Enisala-*Palanca* (Jugănaru, Ailinci, Stănică 2004);
3. 4.50x3.30 m: Murighiol-*Ghiolul Pietrei* (Lungu 1991: 66);
4.50x?: *Dwelling 7* in *Tranch 2* from Revărsarea-*Tichilești* (Simion 2003c: 101);
4.30x? m: Telița-*Amza* (Baumann 1995: 20 and pl. II);
4. 3.10x? m: Rasova-*Malu Roșu* (Irimia 1974: 87);
5. 3.60x2.55 m: Rasova-*Malu Roșu* (Irimia 1974: 87);
6. 3x3 m: *Dwelling 5* in *Tranch 2* from Revărsarea-*Tichilești* (Simion 2003c: 100 f.);
3.00x2.25 m: Murighiol-*Ghiolul Pietrei* (Lungu 1991: 66);
7. 3.00x1.90 m: Telița-*Amza* (Baumann 1995: 20 and pl. II);
8. 2.90x? m: Rasova-*Malu Roșu* (Irimia 1974: 88);
9. 2.35x1.65 m: Rasova-*Malu Roșu* (Irimia 1974: 88).

8.3.4.2.1.3 Orientation

1. NNE-SSW: in the case of the *Pithouse 1/1999* from Babadag (Jugănaru, Ailincăi, Morintz 2002: 46);
2. South (entrance)-north: Babadag, Telica-*Amza* (Baumann 1995: 20 and pl. II);
3. West/Northwest (entrance)-east: Murighiol-*Ghiolul Pietrei* (Lungu 1991: 66), Garvn-*Mlăjitul Florilor* (Jugănaru 1997b).

8.3.4.2.1.4 Depth

1. 1.40-2.15 m (from the recent level of the ground): *Pithouses 1-2* and *4* from Rasova-*Malul Roșu* (Irimia 1974: 87 f.);
2. 1.25 m (?): *Pithouse in S1/2003* from Enisala-*Palanca* (Jugănaru, Ailincăi, Stănică 2004);
3. 0.98 m: *Pithouse 3* from Rasova-*Malul Roșu* (Irimia 1974: 87 f.);
4. 0.90 m: *Dwelling 7* in *Tranch 2* from Revărsarea-*Tichilești* (Simion 2003c: 101);
5. 0.80 m: *Dwellings 1* and *3* in *Tranch 1* from Revărsarea-*Tichilești* (Simion 2003c: 100);
6. 0.55/0.60 m in the case of the *Pithouse 1/1999* from Babadag (Jugănaru, Ailincăi, Morintz 2002: 46), Telița-*Amza* (Baumann 1995: 20 and pl. II);

7. 0.40 m: Garvăn-*Mlăjitul Florilor* (Jugănaru 1997b);
8. 0.30 m: Telița-*Amza* (Baumann 1995: 20 and pl. II);
9. Murighiol-*Ghiolul Pietrei* (Lungu 1991: 66).

8.3.4.2.1.5 Using Time

1. One phase: The majority of the pithouses;
2. Two phases: *Pithouse 1/1999* from Babadag (Jugănaru, Ailincăi, Morintz 2002: 46).

8.3.4.2.1.6 The Pithouses Fitting Outs

1. Steps: one step (paved with stone slabs) at Babadag (Morintz 1964; 1987: 45); two steps *Pithouse 1/1999* from Babadag (Jugănaru, Ailincăi, Morintz 2002: 46); five steps (possible benches) at Rasova-*Malul Roșu* (Irimia 1974: 87);
2. Hearths: Telița-*Amza* (Baumann 1995: 20 and pl. II), Rasova-*Malul Roșu* (*Pithouse no. 1*) (Irimia 1974);
3. Pits: Rasova-*Malul Roșu* (Irimia 1974: 87), Telica-*Amza* (Baumann 1995: 20 and pl. II);
4. Floor paved with undressed stones and slabs: Gura Canliei (Irimia 1981b: 74);
5. Some central pits were discovered in some constructions, possibly indicating the existence of a pole for supporting the roof: Rasova-*Malul Roșu* (Irimia 1974).

8.3.4.3.2 Surface (Ground) Constructions

We have chosen to employ the term “construction” instead of the term, “dwellings”, because such complexes were not always used as dwellings. Generally, it is just the remains of such constructions that have been identified (Irimia, Conovici 1993: 54; Jugănaru 1995: 32; Jugănaru, Ailincăi, Târlea, Vernescu 2004). Many of them are simple, while some others have a fitted floor: Babadag, Cernavodă (Morintz 1964: 102; Irimia 1974: 111).

8.3.4.3.2.1 Shape

Generally, the remnants of some above the ground constructions do not provide us with a clear image concerning their shapes. Still, at Enisala-*B*, the construction had a rectangular shape (Dragomir 1974: 133).

8.3.4.3.2.2 Size

Information is also unclear regarding this aspect. It seems that the complex from Revrsarea-*Cotul Tichilești* measured 4 m² (Baumann 1995: 230 and pl. III/3, XXII). The rectangular construction from Enisala-*B* had dimensions of 5.00x3.50 m (Dragomir 1974: 133). *The dwelling no. 2* in *S1* from Revărs area-*Tichilești* had a side of 2.30 m long (Simion 2003c: 100).

Most interesting is the construction in *Tranch 1-3* from Gura Canliei (Irimia 1981b: 74 f.), that had dimensions of 6x4 m, with a north-south orientation and was marked with a compact group of stones. In the north-eastern part, at depth of 1.90 m, the remnants of a decorated hearth were investigated (Irimia 1981b: figs. 13/10, 17/1, 18/1. For the attempts made to reconstruct the hearth see Irimia 1981b: figs. 9/3, 10/3). The fire installation was raised upon a layer of big stones and had the dimensions of 0.90x0.85 m. Its thickness measured about 0.03 m.

8.3.4.3 The Fire Installations

8.3.4.3.1 Hearths

We will analyze here just the fixed ones. Yet, the Babadag milieu is also characterized by portable ones (Rasova-*Malul Roșu*, cf. Irimia 1974: 89).

8.3.4.3.1.1 Location

1. In the surface constructions: Babadag (5 out of the 13 dwellings investigated in 1991-1992 have hearths), Enisala I, Satu Nou-*Valea lui Voicu*, Revărsarea-*Cotul Techilești* (Dragomir 1974: 133; Irimia, Conovici 1993: 54, 97; Morintz, Jugănaru 1995: 178, 181; Morintz, Jugănaru, Munteanu 1995: 222; Baumann 1995: 230 and pl. XXII);
2. In pithouses: Rasova-*Malul Roșu*, Telița-*Amza* (Irimia 1974: 87; Baumann 1995: 20 and pl. II);
3. Outside some constructions and in domestic pits: Rasova-*Malul Roșu*, Niculițel-*Cornet*, Babadag (Irimia 1974: 89; Topoleanu, Jugănaru 1995: 203), Satu Nou-*Valea lui Voicu* (Irimia, Conovici 1993: 97 and fig. 2).

8.3.4.3.1.1 Shape

1. Resembling the U letter in plan: Revrsarea-*Cotul Techilești* (Baumann 1995: 20 and pl. II);
2. Rectangular in plan: Enisala I (Dragomir 1974: 133);
3. Oval and circular in plan: Babadag, Satu Nou-*Valea lui Voicu* (Irimia 1974: 87; Irimia, Conovici 1993: 54, 97; Morintz, Jugănaru, Munteanu 1995: 222; Schuster 2004: 318).

8.3.4.3.2 Kilns

This kind of fire installation is rare among the sites of the Babadag Culture. At Babadag during the excavations in 1991-1992 a kiln for ceramic burning was found at Babadag (Morintz, Jugănaru, Munteanu 1995: 223 and fig. VII; Schuster 2004: 331). It had the shape of the letter “U”, and it was preserved at a 2.21 m length and the width of its mouth was of 1.60 m. Its walls had a preserved width of 0.05-0.10 m. Inside the kiln

a grill, a clay cork for temperature regulation, two broken vases that were possible to reconstruct, some other ceramic fragments, a lot of ash were recovered (Morintz, Jugănar, Munteanu 1995: figs. VIII-IX).

8.3.4.4 The Pits

These have been discovered inside constructions, either above, underground, or near them.

8.3.4.4.1 Shape

1. According to the shapes of their mouth, there are circular and oval-like pits, for example, at Enisala I (Jugănar, Ailincăi, Stănică 2004), Revărsarea-*Tichilești* (*Pit 13*, diam. 1.00 m; Simion 2003c: 101), and Gura Canliei (*Pits A and B*; Irimia 1981b: 72);
2. In depth, they look like a cylinder or a bell (truncated): Enisala II (Lăzrucă, Mănușu-Adameșteanu 1980: 146), Niculițel-*Cornet* (Topoleanu, Jugănar 1995: 203 f.), Babadag (Morintz 1964: 102; 1986: 60; 1987: 45 f.; Morintz, Jugănar, Munteanu 1995: 222 f.; Morintz, Jugănar 1995: 178 ff.), Rasova-*Malul Roșu* (Irimia 1974: 88 f.), Telița-*Amza* (Baumann 1995: 19 f.), Gura Canliei (Irimia 1981b: 72, 74) etc.

8.3.4.4.2 Size

Variable; some of them are small, especially in depth (Revărsarea-*Tichilești*, Gura Canliei-*Pits A and B*) (Irimia 1981b: 72; Simion 2003c: 100), some others, like those at Revărsarea-*Tichilești* reach 1.80 m diameter/1.00 m depth (*Pit 24*; Simion 2003c: 102), 1.20 m diameter/1.00 m depth (*Pit 20*; Simion 2003c: 101), 1.20 m diameter/1.10 m depth (*Pit 17*; Simion 2003c: 102), 1.25 m diameter/1.40 m depth (*Pit 15*; Simion 2003c: 102), 2.10 m diameter/1.10 m depth (*Pit 21*; Simion 2003c: 101).

8.3.4.4.3 Functionality

1. Domestic and storage pits: Enisala II (Lăzrucă, Mănușu-Adameșteanu 1980: 146), Enisala I (9 pits investigated, cf. Jugănar, Ailincăi, Stănică 2004), Rasova-*Malul Roșu* (Irimia 1974: 88-89), Telița-*Amza* (Baumann 1995: 19 f.), Niculițel-*Cornet* (Topoleanu, Jugănar 1995: 203-204), Satu Nou-*Valea lui Voicu* (Irimia, Conovici 1993: 53 f.), Hârșova-*Rasim* (Morintz, Șerbănescu 1974: 47), Gura Canliei (Irimia 1981: 72 ff.), Tulcea-*Dealul Taberei* (Baumann 1975: 214 f.), Revărsarea-*Tichilești* (24 pits; Simion 2003c) and, of course, Babadag (Morintz 1964: 102; 1986: 60; 1987: 45 f.; Morintz, Jugănar, Munteanu 1995: 222 f.; Morintz, Jugănar 1995: 178 ff.);
2. Ritual pits:
 - 2.1 With human remains: Babadag (Morintz, Jugănar 1995: 182; Jugănar 1997b: 104), Enisala I (*Pit no. 8*, out of *Tranch II*, investigated in 2003, oval, 1.90x1.25 m and a depth of 0.70 m, contained an incomplete human skeleton: respectively,

the skull, a scapula, a clavicle, a humerus and therib cage; cf. Jugănar, Ailincăi, Stănică 2004), Revărsarea-Dealul Techilești (Information of Professor Gavrilă Simion), Satu Nou-Valea lui Voicu (*Pits nos. 41, 43-44 and 46*; Irimia, Conovici 1993: 52 f., 89, 91, 94 and fig. 3/8a-b), Niculicel-Cornet (Topoleanu, Jugănar 1995), Garvăn-Mlăjițul Florilor (Jugănar 1997b: 104 and fig. 1), Rasova-Malul Roșu (Irimia 1974: 124 f. and figs. 3-4).

These discoveries in settlements, especially the pits with complete skeletons - Rasova-Malul Roșu - were initially considered as being burials (Irimia 1974). More recently, Gabriel Jugănar (1997b: 104), considers these finds from Babadag (a truncated pit containing 3 skeletons in flexed position and overlapped), Rasova-Malul Roșu and Garvăn-Mlăjițul Florilor, to be ritual depositions.

- 2.2 With animal remnants: At Satu Nou-Valea lui Voicu (*Pits nos. 41, 43-44, 46*; Irimia, Conovici 1993: 63 ff., 89 ff.)-parts of various animals like dogs and sheep were found, while a complete dog skeleton was found at the bottom of a truncated pit (*Pit no. 48*) .

8.4 Some Concluding Remarks

Even if during the recent years more intense research has been carried out on Dobroudja sites from the Bronze Age and Hallstatt Period, information gathered concerning these habitats is not always satisfactory. Yet, despite these gaps, the image of the settlements, houses etc. in the mentioned periods of Dobroudja can be at least partially reconstructed.

What we have learned to date, we owe to Sebastian Morintz, Done Șerbănescu, Gavrilă Simion and Mihai Irimia who can be considered pioneers in this field of research. The newer results come from the work of extremely active young specialists, like Gabriel Jugănar, Florin Topoleanu and their teams.

Our effort in this work was to offer a systematization of available data for future in-depth research and to assist in comparative analyses with neighboring and distant regions.

This study was written in 2008 and represents that year's state of research.

8.4.1 List A. Possible, Early and Middle Bronze Age Settlements in Dobroudja

Bădila, Niculițel comm., TL (Tulcea) County. Possible settlement (?) of the *MBA* (The end of this period?). Lit.: Lăzarcă 1984: 282; Vasiliu 1996a: 9 f.

Calfa, Topolog comm., TL County. Settlement (?) of the *MBA* (?). Lit.: Vasiliu 1996a: 17 ff.

Cheia-Chirșlic, Târgușor comm., CT (Constanța) County.
Lit.: Irimia 2003: 253 f. and fig. 4/1.

Cochirleni, comm. Rasova, CT County. A settlement of the *MBA* located between Izvorul Mare and Cochirleni, on an valley adjacent to the Danube. Lit.: Hașotti 1985: 8 f.

Crucea, comm. Crucea, CT County. Possible settlement (?) of the *EBA* (?). Lit.: Munteanu 1991: 410.

Gârlița, Ostrov comm., CT County. Possible settlement (?) of the *EBA* (?). Lit.: Munteanu 1991: 410.

Grădina, comm. Târgșor, CT County. Possible settlement (?) of the *EBA*. Lit.: Hașotti 1985: 8.

Izvoarele, Lipnița comm., CT County. Settlement of the Bronze Age (*EBA* or, more probable, *MBA*). Lit.: Hașotti 1985: 8.

Luncavița-Șase Izvoare, comm. Luncavița, TL County. Possible settlement (?) of the *MBA* (?). Lit.: Lăzurcă 1984: 282, 287; Vasiliu 1996a: 14.

Mahmudia, comm. Mahmudia, TL County. Possible settlements (?) of the *EBA* and/or of the *MBA* (?). Lit.: Vasiliu 1996b: 27 ff. with the older literature.

Negureni, Bneasa comm., CT County. Possible settlement (?) of the *EBA*. Lit.: Irimia 2003: 257 f.

Ovidiu, City of Constanța, CT County. Settlement (?) of the Bronze Age (*MBA*?). Lit.: Hașotti 1985: 9.

Sarichioi-La Bursuci, Sarichioi comm., TL County. Settlements (?) of the *MBA* and *LBA*. Lit.: Oberländer-Tîrnoveanu 1979; Vasiliu 1996a: 15 ff.

Târgșor, Târgșor comm., CT County. Settlement of the Bronze Age (*EBA*, or more probable, *MBA*). Lit.: Hașotti 1985: 8.

Topraisar, Topraisar comm., CT County. Possible settlement (?) of the *EBA* (?). Lit.: Lăzurcă 1984: 282, 288; Vasiliu 1996a: 16.

Tuzla, City of Constanța, CT County. Settlement (?) of the *EBA* (?). Lit.: Munteanu 1991: 413 and fig. 13.

Nordul Dobrogei I, TL County. Possible settlement (?) of the *MBA* (? The end of this period). Lit.: Lăzurcă 1984: 288; Vasiliu 1996a: 9 f.

8.4.2 List B. The Coslogeni Culture in Dobroudja

Adamclisi-Platou Est, Adamclisi comm., CT County. On a plateau. Coslogeni, Latene, Roman overlapping. One stratum. Domestic pits? Lit.: Barnea, Barnea et al. 2004: 14-21.

Beidaud-Calebair (Dealul Cetății), Baia comm., TL County. About 2.5 km away from the commune, east of the Carabalâc Hill, between the Căilderea Valley and Water pump Valley (Valea cu Cișmea), on the Calebair Hill, that has an elevation of approximately 25 m above the valleys. In the fortification of the Babadag Culture, Coslogeni ceramics (in the wall, pits etc.). Lit.: Simion, Lăzurcă 1980; Simion 1989: 216; 2001: 317 and pl. II/11, III; 2003a: 64-65 and pl. 2/11, 3; 2003b: 79 ff. and fig. 6; Jugănaru 1997a.

Buceag, Ostrov comm., CT County. Lit.: Morintz 1978: 122 and fig. 60/15; Irimia 1981c: 353 ff. and figs. 4/2-3, 5-6; 5/1-6; 2001: 185; 2002: 140.

Canlia, Lipnița comm., CT County. Coslogeni materials were found at the mouth of the Canlia Valley. Lit.: Morintz and Angheliescu 1970: 402; Morintz 1978: 122 and fig. 60/12; Florescu 1991: 146; Simion 2001: pl. II/ 4; 2003a: pl. 2/4.

Capidava, Topalu comm., CT County. Possible settlement. A stone scepter was found. Lit.: Cios 1986; Simion 2001: pl. II/ 7; 2003a: pl. 2/7.

Casimcea, Casimcea comm., TL County. Possible settlement. A small bronze deposit was found. Lit.: Simion 1999: 12 f.; 2003a: 67-68.

Cerna, Cerna comm., TL County. Possible settlement. A bronze axe was found. Lit.: Simion 2003a: 68.

Chirnogeni, Chirnogeni comm., TL County. On the territory of the village, probably in an area with remnants of a Roman settlement. A vase with two handles with knobs. Lit.: Florescu 1991: 147; Situri 1996: 32.

Enisala-Palanca, Sarichioi comm., TL County. Upon an erosion witness on the bank of the lake, north-northeast from the village. Sporadically habitation remnants. Lit.: Morintz and Angheliescu 1970: 403; Morintz 1978: 122 and fig. 60/4; Florescu 1991: 149; Simion 2001: pl. II/ 14; 2003a: pl. 2/14.

Garvăn-Mlăjitul Florilor, Jijila comm., TL County. Promontory on the bank of the Jijila Lake. Ceramic fragments in the Babadag I layer. Lit.: Jugănaru 1997b; Irimia 2001: 185; 2002: 140; Simion 2001: pl. II/ 19; 2003a: pl. 2/19.

Gârlița-Gura Văii Babii, Ostrov comm., CT County. Upon the high bank of the Bugeac lake, south of the Valea Babei. Coslogeni (Sabatinovka?) habitation, overlapped by Early Hallstatt depositions. Habitation remnants. Lit.: Cârjan 1969: 129 ff. and fig. 25-28; Morintz and Angheliescu 1970: 400 ff. and fig. 31/1-5; Morintz 1978: 122 and fig. 60/13-14; Irimia 1981c: 353 ff. and fig. 4/2-3,5-6; 5/1-6; 2001: 185; 2002: 140; Florescu 1991: 149-150 and fig. 91/1,7,9-10; 117/1; Simion 2001: pl. II/ 3; 2003a: pl. 2/3.

Ghindrești-Site 13, Horia comm., CT County. On abluff, 2 km away from the village. Habitation remnants overlapped by Early Hallstatt vestiges. Some deposits. Lit.: Morintz and Angheliescu 1970: 402; Morintz 1978: 122 and fig. 60/7; Florescu 1991: 149 and 91/4, 6, 8 ; Hașotti 1997: 129; Simion 2001: pl. II/ 8; 2003a: pl. 2/8.

Grădina 1, Târgșor comm., CT County. A *pythos* (Sabatinovka?-Coslogeni) vase. Lit.: Irimia 2001: 183 and fig. 1; 2002: 137 f. and fig. 1.

Grădina 2, Târgșor comm., CT County. Two big dimension vases (Sabatinovka?-Coslogeni). Lit.: Irimia, Bardac 1996; Irimia 2001: 183 and fig. 2; 2002: 138 f. and fig. 2.

Hârșova-La Lac, Hârșova town, CT County. Close to the Calea Mare Hill, on the spot *La Lac*, about 3 km south of the town. Coslogeni vestiges, overlapped by Early Hallstatt ones. Habitation remnants. Lit.: Morintz and Angheliescu 1970: 403 and fig. 31/6-7; Morintz 1978: 122 and fig. 60/6; Florescu 1991: 150 and fig. 91/5; Simion 2001: pl. II/ 9; 2003a: pl. 2/9.

Jijila-Cetățuia, Jijila comm., TL County. On a plateau, at 175 m altitude, in the zone of the springs of the Jijila creek, south-west from the locality. Coslogeni, Babadag I-III materials. Lit.: Simion 2002a.

Limanu, Medgidia town, CT County. South of the locality. Sporadically remnants. Lit.: Morintz 1978: 122 and fig. 60/9; Florescu 1991: 150 and fig. 91/2-3; Simion 2001: pl. II/ 13; 2003a: pl. 2/13.

Măcin, Măcin town, TL County. Sporadically remnants. Lit.: Simion 2001: pl. II/ 20; 2003a: pl. 2/20.

Murighiol-Ghiolul Pietrei, Murighiol comm., TL County. East of the *Ghiolul Pietrei*, on a terrace. A Babadag I-II layer. Coslogeni fragments. Lit.: Irimia 2001: 185; 2002: 140.

Niculitel-Cornet, Niculitel comm., TL County. Possible settlement. Lit.: Simion 2001: pl. II/ 17; 2003a: pl. 2/17.

Parcheș, Somova comm., TL County. Possible settlement. A stone sceptre was found. Lit.: Simion 2001: pl. II/ 16; 2003a: pl. 2/16.

Poarta Albă, Poarta Albă comm., CT County. Somewhere on the territory of the locality, Coslogeni materials were found. Lit.: Morintz and Anghelescu 1970: 402; Morintz 1978: 122 and fig. 60/8; Florescu 1991: 151; Simion 2001: pl. II/ 12; 2003a: pl. 2/12.

Rasova-Malul Roșu, Rasova comm., CT County. On a promontory of small size. Under the vegetal *stratum*, the Babadag layer was found, with a thickness of 0.25-0.35 m. Coslogeni ceramic fragments were found in the layer. Lit.: Irimia 1974: 81-84; 2001: 185; 2002: 140; Morintz 1978: 122 and fig. 60/10; Simion 2001: pl. II/ 6; 2003a: pl. 2/6..

Revărsarea-Dealul Tichilești, Isaccea comm., TL County. Coslogeni fragments in the Babadag I layer. Lit.: Simion 2003a: pl. 2/18; 2003c: 103 and fig. 3, 9/12, 10/1-3.

Sabangia, Sarichioi comm., TL County. Bronze dagger that belonged to the Coslogeni Culture, found at the margin of a Yamnaya *tumulus*, coming from a possible settlement or, more probable, a component of a funerary inventory. Lit.: Simion 1999; 2003a: 67 and pl. 6/1.

Saraiu, Saraiu comm., CT County. Possible settlement. Lit.: Simion 2001: pl. II/ 10; 2003a: pl. 2/10.

Sarichioi, Sarichioi comm., TL County. Possible settlement.

Sarinasuf-Fundea, Murighiol comm., TL County. At the southern border of the locality. Under Late Hallstatt vestiges, Coslogeni remnants were identified. Lit.: Morintz and Anghelescu 1970: 404; Morintz 1978: 122 and fig. 60/3; Florescu 1991: 152; Simion 2001: pl. II/ 15; 2003a: pl. 2/15.

Satu Nou-La Armana, Oltina comm., CT County. At the north-eastern border of the locality. Under pre-feudal vestiges. Sporadic remnants. Lit.: Morintz and Anghelescu 1970: 402; Morintz 1978: 122 and fig. 60/11; Florescu 1991: 152.

Satu Nou-Valea lui Voicu, Oltina comm., CT County. On a triangle-shaped promontory. Several *strata* (La Tène, Babadag). The Babadag *stratum* has two layers. Ceramic fragments in all layers. Lit.: Irimia, 2001: 184 and figs. 4-6; 2002: 139 and figs. 4-5; Simion 2001: pl. II/ 5; 2003a: pl. 2/5.

Stânca, Casimcea comm., TL County. Sporadically remnants. Lit.: Morintz 1978: 122.

Stejaru-ValeaDulgherului, Saraiu comm., CT County. On the southern slope of the Valea Dulgherului, about 1,5 km east of the locality. About 10 ha. Several cinderers-zolniki (10 ?). Lit.: Morintz and Anghelescu 1970: 403; Morintz 1978: 143; Florescu 1991: 152.

Târgșor-Urs, Târgșor comm., CT County. The southern and eastern slopes of a hillock bordered by the Derea River. Some deposition. Lit.: Hașotti 1997: 27.

Telița-Amza, Frecăței comm., TL County. On the high terrace of the lower course of the Telița creek. Several layers (Roman, Babadag I-III). For the Coslogeni Culture we have a vase.

Lit.: Baumann 1995: 20; Jugănar, Baumann 2001: 205.

8.4.3 List C. The Settlements of the Babadag Culture

Argamum-Capul Doloșman, Jurilovca comm., TL County. Babadag II?-III. On the high bank of the Razelm river. A not uniform layer. 2 pithouses, domestic pits. Lit.: Coja 1972: 33-34 and fig. 2/1-9; Jugănar 1996: *Maps no.* 2/3, 3/3; Mănușu-Adameșteanu 2002: 179 f.

Babadag-Dealul Cetățuia, Babadag town, TL County. Babadag I-III phases. On the north-eastern bank of the Babadag lake. Several cultural layers (Hallstatt, Hellenistic, Roman). The Hallstatt *stratum* has 4-5 habitation layers. Several pithouses, above-ground dwellings, domestic and storage pits, fire installations, pits with human skeletons, wall and defending ditch were found in the southern part of the settlement. Lit.: Morintz 1964; 1971; 1986; 1987; 1990a; Morintz, Jugănar 1995; Jugănar 1996a: *Map no.* 1/1, 2/1, 3/1; Morintz, Jugănar, Munteanu 1995; Jugănar, Ailincăi, Morintz 2002; Jugănar, Ailincăi, Târlea, Vernescu 2004.

Beidaud-Calebair, Baia comm., TL County. Babadag I-II phases. On an elevation. Fortified settlement with wall. 5 dwellings and 12 domestic pits were identified. Lit.: Simion, Lăzarcă 1980; Simion 1989: 216 ff.; 2003b; Jugănar 1996a: *Map no.* 1/12, 2/10; 1997a.

Cernavodă-Dealul Sofia. Cernavodă town, CT County. Babadag II-III phases. On the bank of the Danube, on a high promontory. Layer? Above-ground dwelling. Lit.: Berciu, Morintz, Ionescu, Roman 1961: 51 ff. and fig. 3; Jugănar 1996a: *Map nos.* 1/15, 2/11, 3/14.

Constanța (Tomis), CT County. Babadag III. Sporadic ceramic fragments. Lit.: Irimia 1975: 90; Jugănar 1996a: *Map nos.* 2/13, 3/13.

Enisala A (Cetate), Sarichioi comm., TL County. Babadag I?-II phases. On an elevation, between the Babadag and Razelm lakes. A layer with a thickness of about 0.20 m. 2 surface dwellings, 1 fire installation. Lit.: Dragomir 1974; Jugănar 1996a: *Map no.* 1/2.

Enisala B (Palanca), Sarichioi comm., TL County. Babadag III. Not far from the medieval fortress. Several layers (Gumelnița, Babadag, La Tène, Roman, Medieval).

Surface dwellings and domestic pits. Lit.: Lăzurcă, Mănucu-Adameșteanu 1980; Jugănaru 1996a: *Maps nos.* 2/2, 3/2; Jugănaru, Ailincăi, Sătnică 2004.

Făgărașu-Nou, Topolog comm., TL County. Unstudied settlement.

Galica, Ostrov comm., CT County. On the Dervent Hill a kiln for the iron ore and slag reduction was found. Lit.: Olteanu 1971: 295-296; 1975: 25; Zah 1971: 194-196.

Garvn-Mlăjitul Florilor, Jijila comm., TL County. On a promontory on the bank of the Jijila Lake a Babadag I-III settlement was investigated. The second layer of those three identified there belongs to the Babadag II phase and probably has several layers. Pithouses, above-ground dwellings, domestic pits, a pit with a human skeleton, a pit with a dog skeleton, 2 ritual platforms were found. Lit.: Jugănaru 1997b; Simion 2003d: fig. 3/a.

Gârlița, Gârlița? comm., CT County (pl. III/10). Fortified Babadag III settlement. Lit.: Morintz 1964: 109; Morintz, Angelescu 1970: 400; Irimia 1975: 89.

Ghindărești A, Horia comm., CT County. In the village area, on a promontory on the bank of the Danube, a settlement was detected. Lit.: Morintz, Șerbănescu 1974: 54 ff.

Ghindărești B, Horia comm., CT County. A second large settlement was found on the bank of the Danube.

Ghindărești C, Horia comm., CT County. On the bank of the Danube, on a promontory, south of the village, a third settlement was identified (Babadag III).

Ghindărești D, Horia comm., CT County. A fourth site, Babadag I-II, is located south of the village, on a promontory, on the bank of the Danube.

Ghindărești E, Horia comm., CT County. Also on the bank of the Danube, on two promontories, there is another settlement (Babadag I).

Gura Canliei, Lipnița comm., CT County. A Babadag III settlement of small dimensions was investigated on a promontory on the bank of the Danube. Several strata were identified, with materials belonging to the Eneolithic, Bronze, Hallstatt, La Tène, Roman, Roman-Bizantine, Early Middle Ages. The Babadag layer measures 0,30-0,40 m. A pithouse, an above-ground construction (cultic? complex), a fire installation, domestic pits were found. Lit.: Irimia 1981b: 67-70, 72-89.

Gura Dobrogei, Cogealac comm., CT County. Lit.: Ciocea 1981: 63.

Hârșova-La Lac, Hârșova town, CT County. A Babadag I-II site was identified.

Hârșova-Rasim, Hârșova town, CT County. North-West of the town, on the high bank of the Danube a settlement with two layers was found (Babadag II and Early Middle Ages). Several domestic pits were investigated.

Hârșova-Tell, Hârșova town, CT County. Babadag III traces were found on the tell. Lit.: Galbenu 1962.

Histria, Istria comm., CT County. Isolated ceramic fragments were identified in the oldest layer of the fortress.

Independența (today Murighiol)-*Ghiolul Pietrei*, Murighiol comm., TL County. East of the *Ghiolul Pietrei*, on a terrace, a Babadag layer was found. Two pithouses were investigated.

Lit.: Lungu 1991: pl. XII-XIII, XIV/2-3,5-8.

Jijila-Cetățuia (La Movila Popii Isac), Jijila comm., TL County. On a plateau, at 175 m altitude, in the area of the springs of the Jijila creek, in the south-west of the location, a late Hallstatt (VII-V c. BC) fortification was found. Coslogeni and Babadag I-III materials were found. Lit.: Simion 2001; 2002a;

Jurilovca-Capul Dolojman, Jurilovca comm., TL County. Babadag materials. Lit.: Irimia 1974.

Mahmudia, Mahmudia comm., TL County. East of the locality, on a promontory, a settlement of the 3rd Babadag phase was identified. Lit.: Oberländer-Tirmoveanu 1980: pl. 2.

Mihai Bravu, Mihai Bravu comm., TL County. Babadag (?) materials. Lit.: Mănucu-Adameșteanu 1993: 183.

Mihai Viteazul, Mihai Viteazul comm., CT County. Babadag materials. Lit.: Ciocea 1981: 63.

Murighiol-Ghiolul Pietrei, Murighiol comm., TL County. Possible settlement. Lit.: Lungu 1991: 63-68 and pl. XII, XIII, XIV/2-3, 5-8.

Niculițel-Cornet, Niculițel comm., TL County. West of the Gorgonel lake, on a high plateau, a settlement with two layers was investigated. The first one is early Roman, while the 2nd one belongs to the Hallstatt period. The Babadag I-III one has a thickness of 1-1,10 m. Pithouses, above-ground dwellings, fire installations, domestic and storage pits, four pits with human parts or complete skeletons were found. Lit.: Jugănaru, Topoleanu 1994; Topoleanu, Jugănaru 1995.

Ostrov-Piatra-Frecăței, Ostrov comm., TL County. On the bank of the Danube, on a high promontory, a habitation with several layers was detected (Babadag, Roman, Early Middle Ages). Few domestic pits have belonged to the Babadag II-III layer. Lit.: Morintz 1964: 108; Barnea et al. 2001.

Piatra, Ostrov comm., CT County. Babadag materials. Lit.: Ciocea 1981: 63.

Poșta-Valea Celicului, Frecăței comm., TL County. Several strata (Babadag, sec. VII-V BC) were found. Above-ground dwellings and domestic pits were assigned to the Babadag Culture (3rd phase). Lit.: Simion 2002b.

Rasova-Malul Roșu, comm., CT County. On a small-sized promontory, a little settlement was investigated. Under the vegetalstratum, the Babadag I-III layer was found, with a thickness of 0.25-0.35 m. Out of the complexes, we could mention: above-ground dwellings, domestic and storage pits. Lit.: Irimia 1974; 2001; 2002: 140.

Revărsarea-Dealul Techilești, Isaccea town, TL County. On a promontory, a Babadag I-III settlement was found, comprising a single layer, in which 13 semi-pithouses, 24 domestic pits and a defending ditch on its southern side were found. Lit.: Simion 2001; 2003c; 2003d: fig. 1/a-b.

Revărsarea-Cotul Techilești, Isaccea town, TL County. A flattened elevation on the bank of the Danube contains a settlement with several strata: early Middle Ages, Roman, La Tène, Hallstatt. belong pithouses, an above-ground dwelling, a burial with a fragmentary human skeleton were assigned to the Babadag Culture (3rd phase). Lit.: Baumann 1995: 229 ff. and pl. X/1, 8-9.

Sarichioi-La Bursuci, Mahmudia comm., TL County. On a promontory which is partly destroyed by the Razelm lake, several ceramic fragments were found. Lit.: Oberländer, Oberländer-Tîrnoveanu 1979: 59.

Sarichioi-La Grădină, Mahmudia comm., TL County. On the bank of the Razelm lake, not far away from the locality, Babadag III ceramic fragments were found. Lit.: Oberländer, Oberländer-Tîrnoveanu 1980: 77 f.

Satu Nou-Valea lui Voicu, Oltina comm., CT County. On a triangle-shaped promontory a settlement with several layers (La Tène, Babadag) was investigated. The Babadag I-III stratum has two layers. It contains pithouses, possible above-ground dwellings and ritual pits. Lit.: Irimia, Conovici 1989; 1990; 1991; 1993; 1997; Conovici, Irimia, Ganciu 2001; 2002.

Sâmbăta Nou, Topolog comm., TL County. Babadag materials. Lit.: Ciocea 1981: 63.

Telița-Amza, Frecăței comm., TL County. On the high terrace, on the lower course of the Telița creek a site with several strata (Roman, Hallstatt) was investigated. To the Babadag I-III, pithouses, above-ground dwellings, fire installations, storage and domestic pits have belonged. Lit.: Baumann 1995: 13-20 and pl. XLVII-LI; 2001; Jugănar, Baumann 2001.

Topalu-Stânca, Topalu comm., CT County. 5 km away from the village, on the high bank of the Danube, a settlement of the phase I-II was detected. Lit.: Morintz, Șerbănescu 1974: 64-68 and figs. 14/10-14; 15.

Tulcea-Dealul Taberei, Tulcea municipium, TL County. No far from the Somovei pond, on a promontory, north-west from the locality, a settlement with several layers (Early Middle Ages, La Tène, Hallstatt) was investigated. Domestic and storage pits have belonged to the Babadag Culture (3rd phase). Lit.: Baumann 1975.

Țibrinu, Mircea Vodă comm., CT County. Possible settlement. Information from Mr. Cătălin Dobrinescu, whom we take the opportunity to thank.

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9 Figurative Representations on the Phalerae Found between the Ural, the Caucasus and the Balkan Mountains (2nd-1st Century BC)

The phalerae are adornment items made of silver or, rarely, of gold, and even more rarely, of bronze. They are usually circular, but are usually concave or conic in profile, and vary in size. Made by stamping or hammering, their finishes were mostly made with a scraper and punctuator; they were attached using silver, bronze or iron rivets or ears, which, in turn, were riveted in place. The decoration on the phalerae consists of geometric, phytomorphic, zoomorphic or anthropomorphic motives. Some of them render deities or mythological scenes. Lastly, it is worth mentioning that, besides their functional role, the phalerae are also very artistic due to their figurative representations.

In the world of the nomads in the Eurasian steppes, the phalerae were generally used as harness appliqué, although they were mostly clothing accessories in the Hellenistic and Roman worlds-but they had other uses as well (Šcukin, 2001: 137-138).

Starting in the second half of the 19th century, many discoveries of highly ornamented phalerae from the Hellenistic age were made in the steppes of Eastern Europe and Western Siberia. They originate in Badragii Noi (Jarovoj, Cirkov 1988: 21-22; Simonenko 1999: 94, fig. 6/2; Mordvinceva 2001a, fig. 3/3), Bubueci (Polin 1992: 50-53, 65-66, fig. 9; Nefedova 1993: 15-20; Šcukin 1994: 98, fig. 33; Shchukin 1995: 211-213, fig. 6; Arnăuț, Ursu Naniu 2000: 351-362; Mordvinceva 2001a: 108-114), Tvardica (Šcukin 1994, fig. 51; Mordvinceva 2001: 80-81, pl. 43), Veseloja Dolina (Simonenko 1999: 94, figs. 6/3-4, 10; Mordvinceva 2001a: 112, fig. 3/1-2), Velikoploskoe (the zone between the Prut and Bug rivers) (Dzis-Rajko, Sunicuk 1984: 148-161; Polin 1992: 53-55, fig. 10/8; Grosu 1995: 167, fig. 23/11), Balakleja (Fettich 1953: 132-133, fig. 3; Šramko 1962: 238-239, fig. 88; Smirnov 1984: 84, fig. 38; Polin 1992: 128-129; Simonenko 1994: 108, fig. 5; Mordvinceva 2001: 78-79, pls. 32-34.), Bulahovka (Kostenko 1978: 78-85, pl. 1; Smirnov 1984: 108-110, fig. 52; Simonenko 1994: 109, fig. 7; Mordvinceva 2001: 78, pl. 31), Jancokrak (Spicyn 1909: 28, figs. 80-81; Guščina 1969: 41-53; Smirnov 1984: 104, fig. 48; Simonenko 1994: 112, fig. 10; Mordvinceva 1997: 106-115; 2001: 79-80, pls. 37-41), Starobel'sk (Spicyn 1909: 27-28, figs. 58-61; Smirnov 1984: 86, figs. 39/1-3, 6; Simonenko 1994: 106, figs. 3/1-3, 6; Mordvinceva 2001: 77-78, pls. 26-30), Taganrog (the zone between the Bug and Don rivers) (Spicyn 1909: 27, figs. 51-55, 57; Trever 1940: 34, 38; Smirnov 1984: 74-75, fig. 29; Mordvinceva 200: 77, pls. 22-25), Fedulov (Lower Don) (Spicyn 1909: 23-24, figs. 43-45, 47-49; Berhin 1962: 37-39; Zaseckaja 1965: 28-36; Mordvinceva 2001: 71, pls. 1-3), Antipovka (Guščina 1961: 241-246; Raev, Simonenko, Treister 1991: 472-476, fig. 4-5; Mordvinceva 2001: 74, pl. 10), Klimenkovka (Middle Don) (Jacenko 1962: 42-50; Smirnov 1984: 80-84, fig. 35; Mordvinceva 2001: 74, pl. 11),

Ahtanizov-skaja (Spicyn 1909: 19-23, figs. 15-16, 21-23, 25, 31; Mordvinceva 2001: 72-73, pls. 6-8.), Korenovsk (Anfimov 1987: 198-199; Marcenko 1996: 80-81; Mordvinceva 2001: 79, pls. 35-36), Novodže-relievskaja (Anfimov 1986: 186-187, fig. 2; Anfimov 1987: 202; Marcenko 1987: 49-50; 1996: 78; Mordvinceva 2001: 80, pl. 41/77, 42), Rogovskaja (Simonenko 2001: 256-257), Sergievskaja (Anfimov 1987: 204; Raev, Simonenko, Treister 1991: 492, fig. 30/4; Marcenko 1996a: 79, fig. 114/2-3; Mordvinceva 2001: 80, pl. 41/76), Seversk (Spicyn 1909: 24-26, fig. 41; Smirnov 1953: 32-37, pl. VIII; Mordvinceva 2001: 76-77, pl. 21), Uspens-kaja (Spicyn 1909: 53, figs. 77-78; Mordvinceva 2001: 71-72, pl. 4), Vasjurina Gora (Rostovcev 1913-1914: 42, 55, pl. 18/24; Mordvinceva 2001: 73, pl. 9/20-25), Verhnij (Marcenko 1996: 78-79, fig. 58/4; Mordvinceva 2001: 72, pl. 5), Voronežskaja (the Kuban region) (Anfimov 1952: 82, fig. 22; Anfimov 1987: 208; Mordvinceva 2001: 81, pl. 46), Žutovo (Mordvinceva 1994: 96-100; 2001: 76, pl. 20), Krivaja Luka (the zone between the Don and Volga rivers) (Dvornicenko, Fedorov-Davydov 1981: 100-105; Mordvinceva 2001: 76, pl. 19), Novou-zensk (Spicyn 1909: 29, fig. 79; Trever 1940: 48-50, pls. 3-5; Mordvinceva 2001: 75, pl. 14), Volodarka (Mordvinceva 1996c: 148-156; 2001: 75, pls. 16-17), Prohorovka (the zone between the Volga river and Ural mountains) (Mordvinceva 1996b: 155-159). To these we can add the items from Sidorovka (Mordvinceva 2001: 75, pl. 15), Išim (Mordvinceva, Zdanovic, Tairov 1997: 176-180; Mordvinceva 2001: 75-76, pl. 18) and those from the Siberian collection of Peter the First (Western Siberia) (Spicyn 1909: 29, figs. 70-71, 74-76; Trever 1940: 45-48, 50-51, pls. 1-2, 6; Mordvinceva 2001: 74, 85-86, pls. 12-13, 54/108). The phalerae complexes from South-Eastern Europe are from Surcea (Fettich 1953: 128-131, figs. 1-2, pl. XVI/1-2, XVII; Mărghitan 1976: 54-55; Crisan 2000: 74, pl. 124 with the entire bibliography; Rustoiu 2002: 125, fig. 84/2-3) and Lupu (Transylvania) (Glodariu, Moga 1994: 33-48; Glodariu, Moga 1997: 585-596; Rustoiu 1997: 84-85, fig. 74; 2002: 123, figs. 81-83), Bucharest-Herastrau (south of the Southern Carpathians) (Popescu 1948: 35-69; Fettich 1953: 144 sqq. For the fibulae-phalerae, see Schnurbein 1986: 420-429, fig. 13; Hachmann 1991: 710-715; Rustoiu 1995: 113-114, fig. 1/2; Rustoiu 1997: 45-46, fig. 45/1-2; 2002: 126, fig. 85/1-2), Jakimovo (Milcev 1973: 1-14), Galice (between the Danube and the Balkans) (Fettich 1953: 128-144, figs. 5-12; Rostovcev 1993: 41, pls. 2-3), Stara Zagora (south of the Balkans) (Schnurbein 1986: 409-420, figs. 7-8; Hachmann 1991: 682-715).

Almost all of these items were published by researchers such as A. A. Spicyn, M. I. Rostovcev, K. V. Trever, I. I. Guščina, I. V. Jacenko, V. I. Kostenko, M. B. Šcukin, V. V. Dvornicenko, G. A. Fedorov-Davydov, N. I. Anfimov, I. I. Marcenko, I. P. Zaseckaja, V. I. Mordvinceva (for the area between Western Siberia and Prut), or D. Popescu, K. Horedt, I. Glodariu, A. Milcev, N. Fettich, R. Hachmann, S. von Schnurbein (for the region west of the Prut River and the southern Danube areas).

As one may observe, discoveries that include Hellenistic phalerae are concentrated in the area between the Volga and the Danube rivers (Fig. 9.1). Of these, those discovered in the immense area between the Prut River and Western Siberia belonged to the Sarmatians (Smirnov 1984: 72-123; Mordvinceva 1996a; 2001; Šcukin 2001).

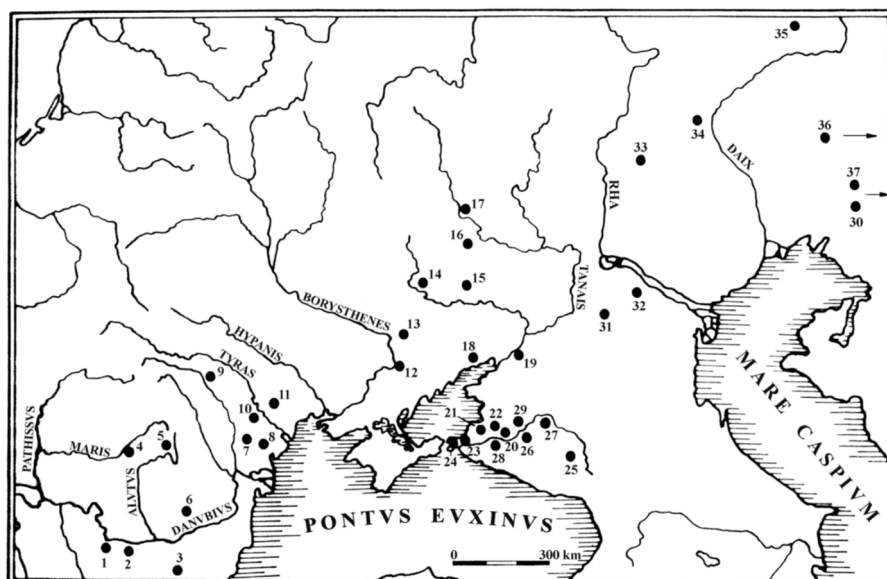


Figure 9.1: Diffusion of the phalerae findings of the 3rd-1st centuries BC in the Sarmatian, Geta-Dacian and Thracian environments. List of localities: 1. Jakimovo, 2. Galice, 3. Stara Zagora, 4. Lupu, 5. Surcea, 6. București-Herestrău, 7. Tvardica, 8. Veseloja Dolina, 9. Badragii Noi, 10. Bubueci, 11. Velikoploskoe, 12. Joancokrak, 13. Bulahovka, 14. Balakleja, 15. Starobel'sk, 16. Klimenkovka, 17. Antipovka, 18. Taganrog, 19. Fedulov, 20. Korenovsk, 21. Novodžerelievskaja, 22. Voronežskaja, 23. Ahtanizovskaja, 24. Vasjurina Gora, 25. Uspenskaja, 26. Sergievskaja, 27. Rogovskaja, 28. Seversk, 29. Verhnij, 30. The Siberian Collection of Peter the First, 31. Žutovo, 32. Krivaja Luka, 33. Novouzensk, 34. Volodarka, 35. Prohorovka, 36. Sidorovka, 37. Išim.

Some phalerae are from tombs, while others are from hoards. As for the latter, scholars disagree on this issue: K. F. Smirnov leans towards the conclusion that they are from tombs destroyed by riders (Cf. Smirnov 1984: 72-123), while V. I. Mordvinceva (2001b: 161) believes instead that they are connected to funerary rites. However, if we take into account the contexts of their findings, it is apparent that many of the phalerae come from complexes that have no indication they came from tombs. The fact that, on some occasions, the presence together of both phalerae and certain types of other items (helmets, silver grails, frontal appliquéés, cauldrons, situlae) make us think that these sets of objects are most likely discovered hoards that belonged to the military aristocracy. We consider that, in many cases, these hoards are not just the result of hiding the goods, but that they were also intended to preserve the social attributes of their owners. If this is the case, the act of their burial probably had a

similar significance to depositing items in tombs.⁷⁹ Obviously, the fact that phalerae were also found in tombs does not contradict this thesis.

The first to categorize the Hellenistic phalerae from southern Russia was A. Spicyn (1909: 18-53), and the first to notice their unique style and eastern origins was M. I. Rostovcev (1993: 39-56), who linked the diffusion of the phalerae in the steppes of the southern Russia to the appearance of the Sarmatians in Eastern Europe (Rostovzeff 1922: 136, 232; Rostovcev 1925: 551-587; 1993: 44). Finally, the same author considers that these objects belong to the “Greek-Iranian-Indian” style (Rostovcev 1993: 44). K. V. Trevert took this belief in the eastern origins of the phalerae even further by and he associated them with the art of the Greek-Bactrian kingdom and coined the term of “Greek-Bactrian” style (Trever 1940: 52-57, 60-61). Both scientists indicated a number of similarities between their style and that of the Greek-Indian toreutics, as well as resemblances to other fields of this art. Finally, it is worth mentioning that both M. I. Rostovcev and K. V. Trever linked the diffusion of the style of these items to certain political events that took place between the third quarter of the fourth century BC and the beginning of the first century BC.⁸⁰ However, later research showed that some of the phalerae that K. V. Trever thought to be of Greek-Bactrian origin had been made northwest of the Black Sea (Fettich 1953: 127-128, 169-171, 177) and in the Bosphorus (Berhin 1962: 37-39; Zaseckaja 1965: 28-36). The conclusions of these authors were not considered in the historical literature in Russia and Ukraine for a long time.

Thus, the term “Greek-Bactrian” style, used rightly in some cases, began to be employed for an entire range of phalerae that had nothing to do with the Greek-Bactrian kingdom. As V. I. Mordvinceva has rightly noticed, this happened particularly in the case of phalerae with phytomorphic and geometric motifs in Balakleja, Bulahovka, Jancokrak, Starobel'sk, Taganrog, Tvardica, Korenovsk, Žutovo or Sergievskaja (Mordvinceva 2001; 2001b: 161-166). According to K. F. Smirnov (1984: 113) and V. I. Mordvinceva⁸¹ (1996a: 14; 2001: 37, 64; 2001b: 164), given the production method and the style, they would have been made in centers of northern Black Sea (Olbia or Bosphorus). N. Fettich thinks that, besides the phalerae in Balakleja, Jancokrak, Starobel'sk, Taganrog, those in Galice, Surcea, Bucuresti-Herestrau (Fettich 1953: 169-170, 176-177) were made in Olbia as well. For his part, M. B. Šcukin considers there is

⁷⁹ It could be that their burial was connected to some warring deity. Finally, it is worth mentioning that recently, M. B. Šcukin, in a study focused on phalerae, believes they were part of sacred Sarmatian complexes. (Šcukin 2001, p. 138).

⁸⁰ From the defeat of the Achaemenid kingdom by Alexander of Macedonia, followed by the emergence of the Seleucid kingdom, its breaking from Bactria and the founding of the Greek-Bactrian Hellenistic kingdom and its kings' occupying Northern India, the creation of the Part kingdom and, finally, until the fall of the Greek-Bactrian empire caused by the nomad tribes from the north, Tochar or Yuchi, who went on to create the Kusan kingdom.

⁸¹ Based on the decoration, the author thinks that the phalerae from Starobel'sk and Tvardica may have been made in one of the centers in Asia Minor. As for influences in the Thracian art on the phalerae north of the Black Sea from 2nd-1st centuries BC, see Mordvinceva, Perevodcikova 2001: 185-187.

not enough data to conclude that the phalerae in Galice, Stara Zagora, Jancokrak or those similar to them were necessarily made specifically in Thracia or Olbia (Šcukin 2001: 156). The same author does not rule out the possibility of their production in other centers, in particular in Asia Minor (Šcukin 2001:156).

K. F. Smirnov undertook a chronological and ethno-cultural analysis of the phalerae from the Hellenistic age (Smirnov 1984). Similar to M. I. Rostovcev, K. I. Smirnov links the phalerae findings in the Eastern Europe steppes to the Sarmatians (Smirnov 1984: 74-75, 112-113, 121-122). Furthermore, he tries to show, based on the phalerae discoveries, the gradual movement of the Sarmatians to the West. A series of works by M. B. Šcukin (1994: 138, 145-146; 2001: 137-161) tackle the problems with the chronological and cultural-historical assignment of the Hellenistic phalerae. The first attempt to come up with a typology of the phalerae from the Hellenistic and the early imperial Roman period belongs to M. Pfrommer (1993: 5-13, 155-164). However, he did not execute an exhaustive analysis of all the sources.

The most complete work on the phalerae from 3rd to 2nd centuries BC belongs to V. I. Mordvinceva (Mordvinceva 2001) who, following a thorough analysis of all the aspects of this issue, managed to identify six style groups, four of which (1-“Ionic” style, 2-“Bosporan” style, 3-“Greek-Bactrian” style and 4 “graphic” style from the Black Sea region) date in the 3rd-1st centuries B. C. Furthermore, the author also lists the centres that made the phalerae into the six style groups and divided them, according to their functionality, into three groups. Inside the groups, she subdivided them into types, based on their respective systems of fastenings on the straps (Mordvinceva 2001: 43 sqq). In a recent study dedicated to the phalerae from the so-called Greek-Bactrian style, M. B. Šcukin (2001: 138) states that no other category of artifacts from the Hellenistic period enjoyed the degree of geographic spread of the phalerae; these are items that also show some stylistic unity. This is also apparent, he argues when one compares certain decorative elements on the phalerae, such as the “flowing waves”, the triangles filled with dots, the zigzag lines, the semi-oval on the sides, the vineyard ivy wreaths, the lace-like ornaments around the central rendering, the background filled with dots or short incised lines, the rosettes made of *acanthus* or lotus leaves etc. (Šcukin 2001: 138).

What is certain is that, while in general, representations on the phalerae reflect themes and production techniques of the ancient art, also show signs of barbarian naivety and primitivism (Šcukin 2001: 138).

Before discussing some of the aspects of the figurative representations, we need to make a short inventory of the problems that are also raised by this type of items.

We would like to make clear from the beginning that we will also include in this discussion items called “fibulae with anthropomorphic marks” since this took place only in the Geto-Dacian pace: fibulae were attached to the round phalerae (Herastrau), and some types of fibulae have anthropomorphic representations similar to those on the phalerae (Balanesti, Coadă Malului, “Transylvania”).

We believe that this symbiosis between two types of items that are different but have the same use is due to an ideological identity, which led to iconographic identity. Based on the type of items, the way they are attached, and on the iconography, we think that the items from the Geto-Dacian world north of the Danube are not very likely to have been used as harness items.

It should be emphasized that iconographic representations also appear on ceramic medallions (e.g. Cârlomanesti) (Drâmbocianu 1979: 95-100), which suggests similar beliefs that required similar manners of representations, regardless of the support or type of items.

9.1 Diffusion Region

In the area between Western Siberia, the Caucasus Mountains and the Balkans, there are 37 findings (Figure 9.1), that amount to 184 items. Of these, 34, containing 177 items, are from the region between the Ural Mountains, Caucasus and the Balkans. All these complexes with phalerae are usually close to flowing bodies of water that reach the Caspian Sea or the Black Sea. A particularly high concentration of items is located northeast of the Black Sea, on the eastern coast of the Sea of Azov, where there are 10 findings. Of these, 28, with a total of 168 items, also include phalerae with figurative anthropomorphic and zoomorphic representations. (Figure 9.1) They number 81 items in these discoveries, and 76 of these are part of the complexes in the area that are currently under research.

9.2 Archaeological Contexts

14 findings, with 71 items, are from tombs; another 20, with 111 items, were in treasures, 8 items are from two isolated findings, and the origin of 4 phalerae remains unknown. The phalerae with figurative representations are as follows: in 10 cases, from tombs, in 16 from hoards, and in 2 cases from isolated findings (Table 9.1).

Notable is the absence of items from settlements, fortresses and sanctuaries and the fact that all the items in the Geto-Dacian group are from isolated hoards.

9.3 Materials

169 silver phalerae, 115 of which were gilded, are from 34 findings and only 11 items are made of gold (Seversk, Vasjurina Gora, Peter the First's Siberian collection). The number of bronze items is also very low, with only 14 items from three discoveries (Bubueci, Vasjurina Gora, Velikoploskoe): the seven bronze phalerae from the tomb in Vasjurina Gora are gold-plated. It is apparent that there are fewer golden items,

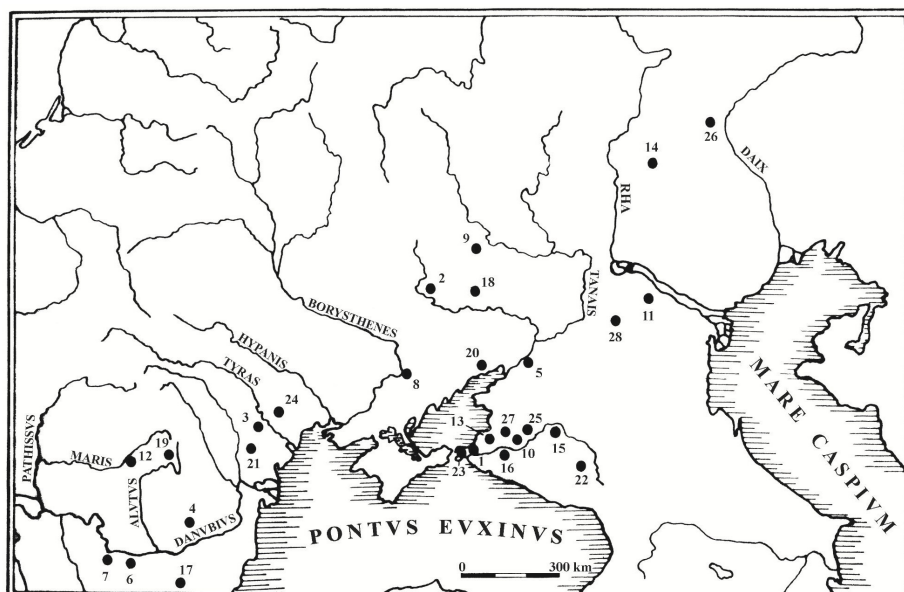


Figure 9.2: Discoveries of phalerae with figurative representations in the region between the Caucasus, the Ural and the Balkan Mountains (2nd-1st centuries BC). List of localities 1. Ahtanizovskaja, 2. Balakleja, 3. Bubueci, 4. București-Herestrău, 5. Fedulov, 6. Galice, 7. Jakimovo, 8. Jancokrak, 9. Klimentovka, 10. Korenovsk, 11. Krivaja Luka, 12. Lupu, 13. Novodžerelievskaja, 14. Novouzensk, 15. Rogovskaja, 16. Seversk, 17. Stara Zagora, 18. Starobel'sk, 19. Surcea, 20. Taganrog, 21. Tvardica, 22. Uspenskaja, 23. Vasjurina Gora, 24. Velikoploskoe, 25. Verhnij, 26. Volodarka, 27. Voronežskaja, 28. Žutovo.

that most items are made of silver, gilded for the most part, and that there are not many bronze items either. Gilding so many silver and bronze items (when they did not have gold), might point to the fact that they actually meant to emphasize the sacred significations of this precious metal, in both the Greek-Roman and the “barbarian” world. The color and shining of the gold, similar to the sun, and its durability impressed the ancient people, who endowed it with miraculous characteristics, not to mention it was also a sign of wealth and high status for those who possessed it (Marazov 1994).

9.4 Cultural Environment

a) 30 findings, with 154 items, were found in Sarmatian tombs and treasures, b) the origin of a discovery with four items is unknown, but they are from the Sarmatian world for sure (the Siberian Collection of Peter the First), c) five findings, with 27 items, are from Geto-Dacian treasures (Galice, Jakimovo, București-Herestrău, Lupu

Table 9.1: Discoveries of phalerae with figurative representations between the Caucasus, the Ural and Balkan Mountains (2nd-1st centuries B.C.).

No.	Locality	Number of items		Material	Discoveries		Cultural environment		Representation type	CHRONOLOGY									
		Total number of phalerae	Phalerae with figurative representation	Gold	Silver	Gilded silver	Bronze	Golden bronze	Tomb	Hoard	Isolated finding	Geto-Dacian	Thracian	Sarmatian	Geometric	Phytomorphic	Anthropomorphic	Zoomorphic	
1.	Ahtanizovskaja	23	3		10	13				*				*	*	*	*	*	End of the 2 nd c. BC-first half of the 1 st c. BC
2.	Balakleja	9	8		9				*				*	*	*	*	*	*	End of the 2 nd c. BC-1 st c. BC
3.	Bubueci	6	4				6			*			*	*	*	*	*	*	First half of the 1 st c. BC
4.	București-Herestrău	2	2		2					*		*		*	*	*	*	*	First half of the 1 st c. BC
5.	Fedulov	8	8		4					*		*		*	*	*	*	*	2 nd c. BC
6.	Galiče	14	2		14					*		*		*	*	*	*	*	End of the 2 nd c. BC-middle of the 1 st c. BC
7.	Jakimovo	2	2		2					*		*		*	*	*	*	*	BC
8.	Jančokrak	9	2		9					*		*		*	*	*	*	*	First half/middle of the 1 st c. BC
9.	Klimenkovka	8	4		6	2				*		*		*	*	*	*	*	1 st c. BC
10.	Korenovsk	2	2		2					*		*		*	*	*	*	*	End of the 2 nd c. BC-first half of 1 st c. BC
11.	Krivaja Luka	2	2		2					*		*		*	*	*	*	*	First half of the 1 st c. BC
12.	Lupu	7	7		7					*		*		*	*	*	*	*	First half of the 1 st c. BC
13.	Novodžerelievskaja	11	3		8	3				*		*		*	*	*	*	*	End of the 2 nd c. BC-first half of the 1 st c. BC
14.	Novouzensk	2	2		2					*		*		*	*	*	*	*	End of the 2 nd c. BC-first half of the 1 st c. BC
15.	Rogovskaja	5	1		5					*		*		*	*	*	*	*	End of the 2 nd c. BC-first half of the 1 st c. BC

Table 9.1: Discoveries of phalerae with figurative representations between the Caucasus, the Ural and Balkan Mountains (2nd-1st centuries B.C.).

Continued

No.	Locality	Number of items	Material	Discoveries origin	Cultural environment	Representation type	Representation	CHRONOLOGY										
		Total number of phalerae																
		Phalerae with figurative representation																
		Gold	Silver	Gilded silver	Bronze	Golden bronze	Tomb	Hoard	Isolated finding	Geto-Dacian	Thracian	Sarmatian	Geometric	Phytomorphic	Anthropomorphic	Zoomorphic		
16.	Seversk	4	4				*					*	*	*	*	*	Second half of the 2 nd c. BC-Beginning of the 1 st c. BC	
17.	Stara Zagora	3	3	3			*			*		*	*	*	*	*	1 st c. BC	
18.	Starobel'sk	5	1	5				*			*	*	*	*	*	*	Second half of the 2 nd c. BC-Beginning of the 1 st c. BC	
19.	Surcea	2	2	2				*		*		*	*	*	*	*	First half of the 1 st c. BC	
20.	Taganrog	6	2	6				*		*	*	*	*	*	*	*	End of the 2 nd c. BC- 1 st c. BC	
21.	Tvardica	2	1	2				*		*	*	*	*	*	*	*	First half of the 1 st c. BC	
22.	Uspenskaja	3	1	3					*		*	*	*	*	*	*	End of the 3 rd c. BC-2 nd c. BC	
23.	Vasjurina Gora	17	1	5	5	7	*	*	*	*	*	*	*	*	*	*	2 nd c. BC-Beginning of the 1 st c. BC	
24.	Velikoploskoe	1	1	1		1	*	*		*	*	*	*	*	*	*	First half of the 1 st c. BC	
25.	Verhnij	6	2	6			*	*		*	*	*	*	*	*	*	2 nd c. BC	
26.	Volodarka	2	2	2				*		*	*	*	*	*	*	*	2 nd c. BC	
27.	Voronežskaja	2	2	2			*	*		*	*	*	*	*	*	*	Second half of the 1 st BC	
28.	Žutovo	5	2	1	4		*	*		*	*	*	*	*	*	*	End of the 2 nd c. BC-1 st c. BC	
TOTAL		168	76	9	43	102	7	7	10	16	2	5	1	22	27	19	20	19

and Surcea), d) in one case, they were found in the southern-Thracian area (Stara Zagora-3 items). We included the findings from Galice and Jakimovo in the Geto-Dacian area because the archaeological discoveries from the 2nd-1st centuries B. C. in this region are similar to those north of the Danube, and the iconography of these is integrated in what we could call the “Geto-Dacian group”,⁸² with features unlike those of the phalerae in the other cultural environments. It is also possible that some phalerae of the Sarmatian region, mainly those made in the Pontic area or in Asia Minor, could have arrived as “diplomatic gifts” offered to the Sarmatian rulers by Mithridates, when he wanted to make them his allies.

9.5 Chronology

All of the items that we analyzed fall into the category of 2nd-1st centuries B. C., but there are noticeable differences between certain chronological steps. Thus, only some portions of the discoveries are from the 2nd century BC, while most of them, including those from the Geto-Dacian period are from the period between the end of the 2nd century and the first half of 1st century BC (Table 1). So far, no discoveries can be dated back to the Christian era.

It should be made clear that this analysis does not include several findings from the second half of the 4th century-beginning of the 3rd century BC, be they from the Scythian (e.g. Alexandropol, Babina Mogila) or Thracian worlds (Panagjurište, Letnica, Chirnogi), since they require a different approach, namely one within the figurative art of those peoples from that time.

We also have not included in the discussion the phalerae from the 1st-2nd centuries B. C. because they raise different problems; these range from questions of whether they were in the Sarmatian environment or, whether following their becoming some sort of decorations in the Roman army, they were diffused greatly throughout the Empire.

We will only refer to those from the 2nd-1st centuries BC because, on the one hand, those from the Geto-Dacian group date back to this period and, on the other hand, they are present only in two cultural environments-the Sarmatians and the Geto-Dacians, who had close relations.

9.6 Techniques

Since most of the items are made of thin silver sheets, they were produced by stamping and were finished with a scraper and punctuator. Castings made two of the

⁸² To that end, see Rustoiu 2002: 123-141

silver phalerae of Žutovo, as well as those in bronze of Bubueci (Figure 9.10/2-3) and Velikoploskoe. The phalerae were attached either with rivets, or with ears made of silver, bronze, iron or, in one case, gold-Seversk (Figure 9.9/2-3). Exceptions consist of the items from București-Herestrău (Figures 9.11/3; 9.15/3), where fibulae were attached to them.

9.7 Shapes and Sizes

Although there are big differences between the diameters of the smallest items, such as three items from Seversk, which range from 3.7cm (Figure 9.9/2-3), and of the largest one, such as the phalerae in Fedulov (Figure 9.5/3)-31.2 cm, most of them have diameters between 7 and 17 cm. Nevertheless, there is a small group of phalerae with diameters over 20 cm, such as those from Ahtanizovskaja, Išim, Prohorovka, Volodarka (Figure 9.4/4-5) and the Siberian collection of Peter the First (Figure 9.10/1).

Almost all of the items are circular and only very few are oval, such as those in Ahtanizovskaja (Figure 9.3/2), Surcea (Figures 9.11/1; 9.15/1), Verhnij (Figure 9.8/2) and Vasjurina Gora. When it comes to the profile, although there is a great deal of variety, they fall into three basic categories: a) phalerae that are almost flat (e.g. Bubueci, Fedulov, Išim, Verhni), b) concave/skyphate phalerae, with a curved profile (e.g. Antipovka, Galice, Fedulov, Klimenkovka, Krivaja Luka, Lupu, Novouzensk, Sidorovka, Surcea, Jancokrak, Uspenskaja, Volodarka, Žutovo) and c) conic/semi-sphere, of the *umbo* type (e.g. Balakleja, Bulahovka, Jancokrak, Korenovsk, Novodžerelievskaja, Starobel'sk, Taganrog, Tvardica).

9.8 Inventory Associations

Since in 14 of the cases, with 71 items, the phalerae are from tombs, it is obvious that they were associated with a varied funerary inventory. Since they are tumuli tombs with a rather rich inventory that sometimes includes military equipment items, defensive or offensive, it may be inferred that, given the use of phalerae, they belonged to rider-aristocrats.

The associations between the 20 treasures are also relevant, since the following items show up: 1) silver conic and semi-spherical items (Ahtanizovskaja, București-Herestrău, Jakimovo, Lupu, Surcea, Velikoploskoe), 2) situlae (Badragii Noi, Jakimovo, Korenovsk, Veseloja Dolina), 3) bronze vessels, in one piece or fragmentary (București-Herestrău, Jakimovo, Jancokrak, Lupu), 4) bronze cauldrons (Bubueci, Velikoploskoe), 5) helmets (Ahtanizovskaja, Antipovka, Bubueci, Sergievskaja, Veseloja Dolina), 6) spear heads (Velikoploskoe, Veseloja Dolina), 7) frontal appliqués (Ahtanizovskaja, Antipovka, Badragii Noi, Bubueci, Klimenkovka, Velikoploskoe),

8) horse bits (Antipovka, Badragii Noi, Klimenkovka, Seversk, Velikoploskoe, Verhnij, Veseloja Dolina), 9) harness appliqués (Badragii Noi, Fedulov, Jancokrak, Klimenkovka, Novouzensk, Starobel'sk, Velikoploskoe, Veseloja Dolina), 10) clothing appliqués (Ahtanizovskaja, Starobel'sk), 11) fibulae (Ahtanizovskaja, Lupu, Tvardica), 12) bracelets (București-Herestrău, Jakimovo).

Obviously, these categories of items are not together in all the complexes of the analyzed area. For instance, the context of these discoveries that is similar in many of these cases including examples of chronological synchronization and Parthial item associations allows us to state at least that the Sarmatian treasures and tombs that include phalerae make up a separate group within the early Sarmatian vestiges in the above-mentioned space. Moreover, the presence in the hoards and graves in the north and north Pontic space of certain types of items (cruciform bridles, cauldrons, and chain fragments), characteristic of the Kuban and Lower Don region, indicate to us the territories of origin of some of the Sarmatians that owned these treasures.

All this, corroborated by dating each category of items separately, as well as the diffusion of certain imported items in the Sarmatian environment, together with data from ancient sources allows us to assume that the Sarmatian hoards used to belong for the most part to Sarmatian mercenaries. These date back to mid-2nd century-mid-1st century BC when the mercenaries were a part of the army of Mithridates Eupator, that was present north and north-west of the Black Sea in the first half of 1st century BC.⁸³

Origins of the phalerae can be approached through two questions: a) when were these items first used, both in general and in the Thracian environment, and b) what were the *stricto sensu* the models of those used during the period in question.

In the north Thracian environment, the 33 golden items of Ostrovul Mare, from late Bronze, may be considered among the earliest specimens (Davidescu 1981: 21). Next would be the phalerae found in the famous treasures of Valcitrăn (the Plevna region), with controversial dates (ranging from the 14th to the 8th centuries BC) (Mikov 1958; Bonev 2004: 135-140). The representations of Assyrian and Achaemenid sovereigns from the 9th-4th centuries BC confirm this early use of phalerae (Anderson 1961, pls. 3-4; Barnet 1975: 32, 37, 65, 147 apud Šcukin 2001: 151). The earliest discovery, from the 8th century BC, is from Hasanlu (Iran) (Ghirschman 1963: 291, pl. 350 apud Šcukin 2001: 151).

83 According to Appian (Mithridates, 15, 53), the army of the monarch of Pont included Scythians, Tauri, Bastarns, Thracians, Sarmatians and other peoples from the Danubian and north-Pontic region. Appian also notes that, for a somewhat later period (before 74 BC, when the third Mithridates war started) the alliance of the Pont king co-opted regal Sarmatians and Iazyges (Mithridates, 69, 293). A. V. Simonenko believes that the spread of the late Sarmatian treasures in the north-Pontic area happened because of the participation of the Sarmatians in the Mithridates wars (Simonenko 1999: 90). On that, also see Raev 1986: 86; Raev, Simonenko, Trejster 1990: 124; Raev, Simonenko, Treister 1991: 469-470; Trejster 1992: 41; Treister 1993: 791-793. The presence of "barbarian" mercenaries in the west-Pontic area is attested to in the first third of the 1st century BC by the funerary complexes in Istria and Callatis, connected to the events in the time of Mithridates VI Eupator (Rustoiu 2000: 277-288).

In the Greek-Roman world, the phalerae started being used somewhat later: we do not have phalerae representations from the classic Greek period, but there are not any from the Roman world of that time either. The Monerbio complex in Italy, from 3rd-2nd centuries BC (although there are not any sure elements for this dating) (Megaw 1970: 130, figs. 204-206), as well as the rendering of the phalerae of the riders on the cauldron in Gundenstrup (Hachmann 1990, fig. 49, Anex 9/1), from somewhere between 2nd and 1st centuries BC, are the earliest evidences of their use in Europe. After this, they become quite spread, probably following strong influences from the east (Šcukin 2001: 151).

However, one should mention that several golden medallions with figurative renderings, anthropomorphic feminine ones in particular, called “Thessalian,” based on the probable origin of the production workshops, circulated in the Greek world in the 4th-2nd centuries BC (Gramatopol 1982: 72-79).

At the northern Black Sea, the phalerae were practically unknown in the early Scythian age. The tumulus in Alexandrovsk stands as proof of their appearance around the threshold between the 4th and the 3rd centuries BC (Alexeev 1992), and M. I. Rostovcev introduced them in this category of items (Rostovcev 1993: 40, pl. 1). However, there are also the three phalerae in the Babina Mogila tumulus, in the Dnepropetrovsk region (Ukraine) that date back to 4th century BC (Šcukin 2001: 151).

As for the golden age of the Thracian-Getic art, it is worth mentioning the items in the treasures of Panagjurište (Venedikov, Gherasimov 1979: 377, cat. no. 244) and Letnica (Venedikov 1996, fig. 21) or the one in the tomb of Chirnogi (Șerbănescu 1999: 231-244).

Since the analyzed area is large and includes different cultural environments, and the typological, stylistic and figurative differences between the items are significant, the origin and evolution of the phalerae is to be approached regionally. Nevertheless, we have to consider the similar features, as well as the connections between various regions.

9.9 Ornamentation Types

Geometric decoration is present on all the phalerae from Sarmatian, Geto-Dacian and Thracian environments of the 2nd-1st centuries BC, whereas the vegetal one is encountered only on items from 23 findings. However, these motifs and arrangements are not included in the scope of our topic and we will not analyze them here.

Zoomorphic figurative representations appear on 19 of the discoveries in the Ural Mountains, Caucasus and Balkans, whereas anthropomorphic ones are present in 20 cases (Tab.1). The phalerae in the Sarmatian complexes of Sidorovska and Išim in Western Siberia, as well as those from the Siberian Collection of Peter the First, also include zoomorphic and anthropomorphic representations, but since they are outside of our area of interest, we will not analyze these ones at this point.

All the 5 findings from the Dacian-Getic area include anthropomorphic representations, whereas zoomorphic ones appear in only three cases.

Surely, in most cases, figurative representations are associated with geometric or phytomorphical ones.

9.10 Possible Interpretations

Interpretations of the iconography on the phalerae must take into account all the discovery data (context, association with other type of items, motifs and decorative combinations etc.) and the whole of the figurative renderings in a certain cultural environment. This is because missing some facts or over-stressing others leads to unrealistic conclusions. In addition, analysis must consider all the representations in a finding, since they used to form a whole. The facts that quite often these were chance discoveries, that some items are missing, and that we can no longer see the order of the images makes it more difficult to grasp their meaning.

All in all, the figurative bestiary is not varied, although it includes both real animals that were domesticated (bulls, horses, he-goats, dogs) and wild (lions, panthers, tigers, deers, wild boars, elephants, vultures/hawks, other birds, porcupines, snakes). Lions, panthers and vultures/hawks are represented most often. The fictional animals that are present include gryphons (9 findings) and a sphinx (one case). However, an anthropomorphic character in some cases has animal attributes that are suggested by just a symbol (e.g. feathers).

Also, the animals are rendered either in their entirety, or by means of just one part: e.g. a bull's head and neck-Uspenskaja (Figure 9.8/4), a bull's head in Stara Zagora, horse heads and necks in Fedulov (Fig. 9.5/4) and Taganrog (Figure 9.10/7), based on the *pars pro toto* principle. Sometimes, we find composite animals, made up of real species (chimera = lion + he-goat + snake in Volodarka). (Figure 9.4/4-5)

The range of real species in the Geto-Dacian group is small and is almost always accompanied by human features (horse, dog, feline, snake and hawk). There is a gryphon at Surcea, but the horse does not appear alone on any item.

The zoomorphic and anthropomorphic figurative representations require analyses based on the cultural environment in which they were discovered since their ideological background is more relevant than the items' formal aspects.

The discoveries from the Sarmatian environment have some common features that we will try to list briefly below.

As expected, the discoveries made between the Sea of Azov, the Caucasus and the Ural Mountains have many similarities with the Oriental art and the Greek-Oriental style. On the other hand, the manner of rendering the animals is characteristic to the style of the nomad peoples, influenced by the civilizations of Asia Minor, Persia and Greece. The art of the steppes refuse to cage the image and instead prioritizes fluidity, an effort to open the shape to the vastness surrounding it

instead of protecting it, as the sedentary peoples try to do; a clear example of this is the objects found at Novouzensk (Figure 9.8/5), Sidorovka and Zutovo (Figure 9.5/1). The bestiary represented is characteristic to the Asian areas both the real (elephants, lions, panthers, etc.) and imaginary animals (various gryphons, sphinxes), reveal influences from the civilizations of Asia Minor and Persia. For instance, the phalerae of Novouzensk and Sidorovka showing intertwined gryphons, are not characteristic of Hellenistic art, whereas such scenes are encountered in China (Trever 1940: 48-50; Šcukin 1994: 146; 2001: 147).

There are no doubts as to the Greek-Indian origin (Trever 1940: 46-48; Mordvinceva 2001: 13-14) of the phalerae with the battle elephants, from the Siberian Collection of Peter the First (Spicyn 1909: 29, figs. 74-76; Trever 1940: 40-48, 50-51, pls. 1-2; Mordvinceva 2001: 36-37, 64, 74, pl. 13), since the analogies for these motifs are quite numerous in the Hellenistic world (Trever 1940: 40-48; Šcukin 2001: 143). Additionally, a battle elephant also appears on one of the phalerae in the Sark (Allen 1971, pl. XIIb; Šcukin 1994, fig. 54; 2001, fig. 5/6) treasure, which included Celtic coins, dating back no further than 58-52 BC, but also on a Roman republican coin, from 82 BC (Allen 1971: 56; Šcukin 2001: 143). We must also include the elephants that grace one of the side plates of the cauldron in Gundenstrup (Šcukin 1994, fig. 55), as well as one of the phalerae in Punjab (Rostovcev 1993: 45, pl. 7), that is kept in the British Museum. An elephant representation, next to other animals, also appears on one of the phalerae preserved in the Medal Cabinet of the National Library in Paris, purchased from Istanbul (Allen 1971: 12-13, pl. XV). The second phalera from this has an inscription with the name of king Mithridates; he was the one who offered these items to the altar of goddess Artemis (Megaw 1970:135).⁸⁴

Another interesting thing is the confrontations between various strong animals (dogs, felines, wild boars, deer and gryphons) that were rendered on the phalerae in Starobel'sk (Figure 9.9/1a-d) and Tvardica (Figure 9.6/3). Certain oriental elements are present in the gryphon phalera of Surcea (Figure 9.11/2), in the representation of the Pegasus wings on the Volodarka phalerae (Figure 9.4/4-5) and even in the representation of the Jancokrak goddess (Figure 9.6/4), where the methods are identical with those of the Achaemenid items (Mordvinceva 1996c: 154; 1997: 107; 2001: 17; Šcukin 2001: 146). We consider as being oriental elements (Mordvinceva 1997: 107; Šcukin 1994: 146; 2001: 146-147) the multi spiral necklaces on the characters necks of the Jancokrak (Figure 9.6/4), Galice (Figure 9.13/1) and Surcea phalerae (Figure 9.11/1). Such necklaces are also found in the Siberian Collection of Peter the First (Artamanov 1973: 168-189) and, as we can see on these coins, the Parthia kings as Mithridates II (124-88BC), Gotarzes I (91-80/78 BC) and Phrates IV (37-30, 29-28, 25-3 BC) also wore them (Lukonin 1977: 126).

⁸⁴ Given that the most famous temple of Artemis was in Ephesos, the phalerae are likely to be from there (Šcukin 2001: 143)

Objects of this kind come from a series of Sarmatian graves of the Kuban region, such as those of Elitnyi (Anfimov 1986a: 190-197; 1987: 181, 201; Marcenko 1996: 33-35, fig. 73), Karstovyi (Anfimov 1987: 181, 201; Marcenko 1996: 33-36, fig. 73) all of them dated in the 1st century BC. We can also add the objects unveiled at Buerova Moguila and the rich Sarmatian hoard of Ahtanizovskaja, dated at the end of 2nd-first half of the 1st centuries BC (Spycin 1909: 21, figs. 8, 10, 12).

The influence of the Hellenistic world is noticeable not only in the actual method of rendering certain animals (Pegasus, horses' heads with Helios etc.) but also in the themes that are taken over from Greek mythology that points to its profound influence on the elite of the Sarmatian world, not only in their daily lives, but also in terms of sacred mentalities.

Although most of the Sarmatian phalerae are from hoards (84 items), there are quite a few that are from tombs (68 items). In terms of function, the data suggest that most of the items were attached to horse harnesses. As for the shape, most of them are conic, and the artistic style is quite similar to Oriental art and the Greek-Oriental or North-Pontic styles. The manner of rendering the animals is characteristic of the animal representations of nomadic peoples, with visible influences from the civilizations of Asia Minor and Persia. The bestiary includes species from that region (lions, panthers) or fictional creatures meant to inspire fear or suggest domination (various types of gryphons, sphinxes).

Two phalerae of Volodorka, made "in the mirror," depict the hero Bellerophon, riding Pegasus, killing Chimera (a composite animal: lion + he-goat + snake) (Figure 9.4/4-5), and a phalera in Seversk shows the victory goddess Athens riding a lion as well as the victory of Dionysus over the giants (Figure 9.9/3). Two phalerae of Ahtanizovskaja show the heads of the Gorgons (Figure 9.3), while other one, from Taganrog, shows Dionysus accompanied by a panther (Figure 9.10/5).

Some phalerae of Fedulov are very interesting. One of them shows Helios, flanked by two horse heads (Figure 9.5/4), another depicts the fight between goddess Athens and giant Alcyoneus (Figure 9.5/5), while on another two items we see the head of human-lion with a spear in its mouth (Figure 9.5/3), and a rider that appears on four phalerae (Figure 9.5/2). Another interesting item is a phalera in Jancokrak that shows a winged female character, with a phiala in her right hand and probably a hawk in the left one (Figure 9.6/4).

Identifying representations from the Sarmatian environment has a high degree of accuracy, since most of it respects the iconography from the Hellenistic world, which suggests that most of them were made in centers that are situated in that region.

This kind of level of interpretation is not the same when it comes to phalerae findings in the Geto-Dacian world.

As far as our data on the Geto-Dacians go, we may reach the following conclusions: a) written sources do not say if and in what manner they rendered their deities, b) no figurative representation has the name of a local deity underneath it, c) no statues,

bas-reliefs or figurative offerings were found buried in sanctuaries, d) we have no sure proof that any kind of animal worship was practiced (Sîrbu 2004: 112).

All the phalerae are from hoards, but none of them are from sanctuaries and tombs. Some phalerae had fibulae attached to them (București-Herestrău), and some fibulae bore representations similar to the phalerae (Bălănești, Coadă Malului, "Transylvania").

Most of these items were likely made in the Geto-Dacian environment, an assumption supported in particular by their technical and stylistic features. Only the phalera of Jakimovo rendering a man seems to be of Hellenistic origin. Ultimately, the essential component of this is not so much the ethnic origin of the one who made it but it is the cultural context: namely, whether the message it sends and the material manner of its construction reflects the mentalities also of the bearer.

The iconography of the phalerae in the Geto-Dacian group expresses a particular cultural background and style of rendering, obviously different from Sarmatian, Hellenistic or West-European. The fact that such representations also appear on ceramic medallions, (e.g. Cârlomanesti) (Drâmbocianu 1979: 95-100) and that they are attached to the fibulae, points to the depth and diffusion of this iconographic motif in the Geto-Dacian mentality.

It seems obvious that these representations were created from an internal need, that they reveal specific mentalities, and that they served a purpose of their own.

It is no accident that most of these hoards date from the first half and the middle of the 1st century BC, when the Geto-Dacian society experienced a period of development and expansion under the rule of king Burebista (Crișan 1978). This explosion of force and political-military force was bound to find a characteristic outlet in the sacred domain as well.

Archaeological research supports the fact that these items were not found either in sanctuaries or around them, that they were not even buried as offerings, nor were they present in tombs (Sîrbu 1993: 139).

Since the name of a deity is not present under any image, and the similarities they bear with the Hellenistic-Roman iconography are irrelevant, it is therefore difficult to interpret them in one way or another.

On the other hand, the fact that these treasures were buried, and that sometimes items were destroyed (e.g. Lupu) stands as proof beyond any doubt that they were sacred. It would be difficult to accept that a person would give up such valuable things without a deep cultural reason. There is no real evidence to back up the previous explanation that these items were hidden because of tough times.

The rider motif is widespread in the Geto-Dacian world as, from the 4th century to the 1st century AD, it is present on the phalerae in Surcea, Lupu and Galice as well (Sîrbu, Florea 2001b: 23-43).

Since no image shows human confrontation, battle scenes, and the riders do not seem bellicose, the extent to which they could be representing a war deity should be called into question (Sîrbu, Florea 2001b: 27-34).

The Surcea rider, accompanied by a dog and hawk (Figure 9.11/1; 9.15/1), seems to be rendering a hunting scene as part of an initiating trial; this was one of the preferred pastimes of the aristocracy. The attitudes of the riders in Lupu (Figure 9.12/3-4; 9.14/5, 7) and Galice (Figure 9.13/2; 9.16/12) suggest solemn moments and high ranks, so they might be deities, but other explanations cannot be ruled out.

Given the type and iconography of the phalerae in the Geto-Dacian environment, as well as the composition of some of the findings, among which those of Lupu and Galice are the most revealing, we agree with the scholars who assume that the inventory in such treasures consists of sets worn by high ranking religious figures of *basilei* on solemn occasions (Medeleț 1993: 18-20).

The fibulae with anthropomorphic shields as well as the phalerae with attached fibulae were obviously used in association with clothing items.

The number, shape and decoration of the items in the Galice hoard suggest that it may have made up ornamentation on horses' harnesses. This was discovered by chance in 1918, and only 14 phalerae from it were preserved, two of which display figurative decoration (Fettich 1953, figs. 5-12; Rostovcev 1993: 41, pls. 2-3).

As for the Jakimovo hoard, two phalerae may have been previously attached to the bottom of conic cups, as shown by a cup from the same treasure that renders a rider (Milcev 1973: 2, fig. 3).

The stylistic features and representations on the phalerae in Stara Zagora (Figure 9.13/5-6) can hardly be considered a product of Thracian mentality, but should rather be associated with Oriental iconography and the items found in Western Europe (Schnurbein 1986).⁸⁵

One of the phalerae from Stara Zagora shows Hercules killing a lion, surrounded by gryphons and felines, and it is meant to inspire fear. (Figure 9.13/5) The lion fight scene also appears on a phalera in Panagjurište, from the second half of the 4th century BC. Another phalera in Stara Zagora renders in its central medallion a feline attacking a he-goat, and the scene is surrounded by gryphons, felines and a bull head (Figure 9.13/6).

Two phalerae in the Medal Cabinet of the National Library in Paris (Schnurbein 1986: 416, fig. 6; Hachmann 1990: 682 sqq., figs. 30-31), similar in style with those found in Stara Zagora, might also be from the Greek-Oriental region.

The discovery of 15 items in Western Europe (13 in Sark, an island in north-western France), and one in Oberaden and Helden (Germany) begins to sketch a new group of phalerae, displaying many stylistic and iconographic similarities with the Greek-Oriental ones and those from Asia Minor and Persia (Allen 1971: 1 sqq., pls. I-XIII; Schnurbein 1986: 409 sqq., figs. 2, 4-5; Hachmann 1990: 682 sqq., figs. 27, 32, 34-40).

⁸⁵ M. B. Šcukin suggests, based on the oriental iconographic elements, that the Stara Zagora phalerae appeared in Thrace following the Sarmatians' expansion to the west or as a result of the diplomatic activity of Mithridates Eupator (Šcukin 2001: 157).

Not only are we dealing with a bestiary of real (elephants, lions, panthers) and fiction animals (gryphons or composite animals) from Asia Minor and Persia, but the rendering method is oriental as well. Only one phalera from Helden shows a human character: it is Hercules killing the lion (Hachmann 1990, fig. 27).

In Western Europe, the phalerae, or perhaps the artisan that made them, were probably in contact with the Sarmatians and the Germanic groups (proto-German, to be more precise), or were the result of the politics of Mithridates Eupator (Šcukin 2001: 157).

The method for attaching/fastening the phalerae to the horse harnesses or clothing items may be seen in some ancient representations, sometimes even on the phalerae themselves.

For example, for Asia Minor and Persia, the manner of attaching the phalerae to the horses' harnesses may be observed on the representations in Dura Europos or Halcajan (Figure 9.17/3).

In the Geto-Dacian world, the manner of attaching the phalerae may probably be observed on the barrel-shaped vessel rendering a rider (Căpitanu 1994: 337, fig. 4; Sîrbu, Florea 2001b: 34, fig.14) (Figure 9.16/5) and on the ceramic pattern from Răcățău. As for the method of attaching phalerae to clothing, this is visible on a phalera in Jakimovo, on a man's right shoulder (Figure 9.13/4; 9.16/4).

The phalerae in Balakleja (Figure 9.4/1-3), Bulahovka, Jancokrak (Figure 9.6/4-5), Starobel'sk (Figure 9.9/1) and Taganrog (Figure 9.10/4-5) belong to the fourth stylistic group in the classification made by V. I. Mordvinceva (the "graphic" style from the Black Sea region), whose essential features are the graphic character, the aspect of representations and the original decoration style. The phalerae in this group stand out due to their rich decoration that consists of geometric and phytomorphic motifs, and, much more rare, anthropomorphic and zoomorphic figures from the barbarian repertoire (Mordvinceva 1996a: 12-14; 2001: 37, 64-65; 2001: 164). All the phalerae in this group are made of a thin sheet of gilded silver. Most of the items were made in the workshops of the Greek cities north of the Black Sea and date back to 2nd-1st centuries BC (still, some items date back to 1st century AD) (Mordvinceva 1996a: 14; 2001: 37, 64; 2001: 164).⁸⁶

As for the phalerae in Klimenkovka, it is worth mentioning that four of them are made of gilded silver; they are circular with a curved profile, and they show two head-to-head gryphons (Fig. 9.8/3). In the stylistic classification of V. I. Mordvinceva, these phalerae fall in the second stylistic category (the "Bosporan" style), characterized by the lack of small elements in the background/decoration and predominant motifs from the Greek methodology (Mordvinceva 1996a: 10-11; 2001: 36, 63-64; 2001b: 162). The phalerae in this style are presumed to have been made in the centers north of the

⁸⁶ According to V. I. Mordvinceva, the phalerae of Starobel'sk and Tvardica date back to the first half of 1st century BC.

Black Sea and in the Kuban region, dating back to 3rd-2nd centuries BC (Mordvinceva 1996a: 10-11; 2001: 36, 63-64; 2001b: 162). Another two silver phalerae from the hoard of Klimenkovka are flat, circular and with a concave profile; these date back to a wider chronological interval and they were made in different centers (Mordvinceva 1996a: 17; 2001: 39, 65; 2001b: 166).

There are also two gilded silver phalerae that are circular and with concave profiles, with a decoration on the exterior that suggests a wheel in motion or the sun disc with curved beams. This decoration is present on a phalera that was initially an Achaemenid plate, from Sarmatian tumulus no.1 in Prohorovka that dates back to the 3rd century BC (Mordvinceva 1996b: 155 sqq., fig. 1) but based on the funerary inventory, seems to be from the 2nd century BC. Such a decoration is present on the phalerae in tumulus no. 2 from Vasjurina Gora, from the second half of 3rd century-beginning of 2nd century BC (Rostovcev 1913-1914: 42, 55, pls. XVIII/1-2, XXIV; Mordvinceva 2001: 73, pl. 9/20-21). The existence of these phalerae, as well as of one decorated with rich geometric and phytomorphic motifs⁸⁷ makes us believe that the dating of phalerae in the Vasjurina Gora, as well as of the entire tomb, is closer to 2nd century-beginning of 1st century BC. The same decoration is also present on the two phalerae in the hoard of Veseloja Dolina (Mordvinceva 2001a, fig. 3/1-3; Bârca 2002, fig. 10/11-12), as well as on the one in the hoard from Badragii Noi (Jarovoj, Cirkov 1988: 21-22; Simonenko 1999: 94, fig. 6/2; Mordvinceva 2001a, fig. 3/3; Bârca 2002, fig. 8/5). Based on the bronze situlae, both hoards are from sometime in the first half of 1st century BC. Four golden phalerae with this kind of decoration are from the hoards of Goni (Georgia), dating back to the 1st-2nd century AD (Mordvinceva 2001: 86, pl. 55/111).

Finally, the phalerae with this kind of decoration are also present on one of the riders' horses rendered on the relief in the Halcajan palace from the late Hellenistic period (Pugacenkova 1979: 90, figs. 103, 112) (Figure 9.17/3). It is worth recalling that the motif suggesting a moving wheel or the solar disc with curved beams is considered within Parthian art to be a sure sign of Achaemenid influence (Šcukin 2001: 142).

Besides the silver phalerae, there is also a bronze item in the Velikoploskoe hoard, that is round in shape and with a curved profile, rendering an embossed man face. The authors who published the Velikoploskoe hoards compare this phalera with those of Bosporan origin from Soloha (Dzis-Rajko, Sunicuk 1984: 152-153). However, as S.V. Polin rightly identifies, this is a formal comparison (Polin 1992: 54). The closest analogies to the Velikoploskoe phalera are the four small bronze phalerae of Bubueci that also render a human face in the center (Polin 1992: 50-53, fig. 9/3-4; Šcukin 1994: 98, fig. 33/1; Arnăuț, Ursu-Naniu 2000: 354, fig. 1/4a-b; Mordvinceva 2001a: 109, fig. 2/2; Bârca 2002a: 216, fig. 1/1) or the Monerbio (Italy) phalerae (Megaw 1970: 130, cat. nr. 204-205). Based on the inventory, we could state that both the Velikoploskoe phalera and the one in Bubueci date back to the first half of 1st century BC.

⁸⁷ See the phalera in Mordvinceva 2001: 22, pl. 9/22

Analysis of the discoveries shows that, besides some common features, the differences between the phalerae with figurative representations from the Sarmatian and the Geto-Dacian cultural areas are much more relevant. Certainly, features more related to iconography are much more expressive, but those concerning the actual data of the discoveries and the items are obvious as well.

Thus, whereas the phalerae from the Sarmatian environment are equally from hoards and tombs, date back to the entire 2nd-1st centuries BC (some even from the end of 3rd century BC), and were mainly used for horse harnesses, the Geto-Dacian items are from hoards alone, date back to the first half and middle of 1st century BC and were used mainly for clothes.

As for the representations, namely the imaginary, there are fundamental differences.

In the Sarmatian phalerae (Figure 9.3-10), one can recognize not just the themes from the Greek-Oriental, but also a similar style in the rendering of the characters. Nomadic influences are particularly visible in the manner of rendering the animals, e.g. the preference given to dynamism and fluidity. The profound influence of the Hellenistic world is visible mostly in the rendering of the heads of Gorgons- perhaps in hopes of petrifying enemies- the presence of the goddesses Athens and Nike, of the gods Helios and Dionysus, of the hero Bellerophon killing the Chimera etc. The influence from the oriental world is particularly present in the forms of the real animals from this region (lions, panthers, elephants) or in those from the imaginary realm of these peoples (gryphons, sphinxes).

However, when it comes to the Geto-Dacians (Figure 9.11-15), the characteristics of the locals, both in terms of ideology and of rendering the iconographic themes comes through much stronger, a result of the traditions of Thracian toreutics. The themes of riders in solemn positions (Lupu, Galice), of the hunt as a trial for achieving high status (Surcea), of the confrontation between the hawk and the snake (Lupu), of the winged characters as “masters of animals” (Lupu, Jakimovo), of bust renderings (Herestrău, Galice, Jakimovo) are ones that are often seen in the Thracian toreutics of the 5th-3rd centuries BC (Sîrbu, Florea 2000a: 105-152). All of these examples are solid evidence for assuming that most of the phalerae were made in the Geto-Dacian region.

Thus, the differences between Sarmatian and Geto-Dacian mentalities, rooted in the respective history, traditions and occupations of each people, are highly visible in this category of items as well.

9.11 List of Discoveries with Figurative Representations

Comment: We will only present the phalerae with figurative representations. For the rest of the discovery inventory, including the phalerae with geometric or phytomorphic representations, see the works included in the bibliography.

1. Ahtanizovskaja, Krasnodar County (Russia). Hoard.

In 1900, a large number of items were found next to the north wall of a funerary chamber; the phalerae are from four harness fittings.

1. Gilded silver phalera, round and with a concave profile ($D = 17.64$ cm, $H = 5.5$ cm), made by stamping and finished with the scraper and punctuator, rendering an embossed Gorgon head, with snakes in the hair and around the neck. However, her face is not frightening (Fig. 9.3/3).

2. Silver phalera, round and with a concave profile ($D = 8$ cm, $H = 1.4$ cm), made by stamping and finished with the scraper and punctuator, rendering an embossed Gorgon head (Fig. 9.3/1).

3. Silver phalera, oval and with a slightly curved profile ($L = 10.1$, $l = 4.4$ cm, $H = 0.75$ cm), made by stamping and finished with the scraper and punctuator, rendering an embossed Gorgon bust. Although the face is almost childlike, it inspires fear in the viewer by the rest of the typical elements that surround its head (Fig. 9.3/2).

One notices the different manner of rendering the faces on the items, perhaps suggesting the three Gorgons.

Dating: The end of 2nd century BC-the first half of 1st century AD.

Ref.: Spicyn 1909, pp. 19-23, figs. 1, 3, 4-35; Kropotkin 1970, p. 21, 28 (the end of 2nd century BC-the first half of 1st century AD); Simonenko 1982, p. 240, 243 (the end of 2nd century BC-the first half of 1st century AD); Rostovcev 1993, p. 42 (2nd century BC); Mordvinceva 1996a, p. 11; 2001, p. 15, 36, 63-64, 72-73, pls. 6-8; 2001b, p. 162, figs. 1/2, 4-5, 7 (the end of 3rd century BC-the first half of 2nd century BC).

2. Balakleja, Harkov County (Ukraine). Ruined tomb.

In 1929, some construction work revealed several items from a destroyed tumular tomb, where the dead was in a pit together with the remains of a wooden construction.

1. Gilded silver phalera, round and with conic profile (*umbo* type) ($D = 14.3$ cm, $H = 5.1$ cm), made by stamping and finished with the scraper and punctuator; the decoration consists of geometric and phytomorphic motifs, plus a lion's head.

2. Gilded silver phalera, round and with conic profile (*umbo* type) ($D = 11$ cm, $H = 3.5$ cm), made by stamping and finished with the scraper and punctuator; the decoration consists of geometric and phytomorphic motifs, plus the representation of a human face (Fig. 9.4/3).

3-8. Six gilded silver phalerae, round and with conic profiles (*umbo* type) ($D = 7.4$ cm, $H = 4$ cm), made by stamping and finished with the scraper and punctuator; the decoration consists of geometric motifs, plus the representation of a lion's mouth (Fig. 9.4/1-2).

Dating: The end of 2nd century BC-1st century BC.

Ref.: Fettich 1953, pp. 132-133, fig. 3; Šramko 1962, pp. 238-239, fig. 88; Smirnov 1984, p. 84, fig. 38 (the end of 2nd century-1st century BC); Polin 1992, pp. 128-129 (the second half of 2nd century-1st century BC); Simonenko 1994, p.108, fig. 5 (the end of

2nd century-1st century BC); Mordvinceva 1996a, p. 14; 2001, p. 37, 64, 78-79, pls. 32-34; 2001b, p. 164 (the end of 2nd century-1st century BC).

3. Bubueci, Ialoveni County (Rep. of Moldavia). Hoard. The Museum of History in Moscow has, as a gift from the governor of Bassarabia, a number of harness and gear items, a fortuitous finding in the village of Bubueci. The complex was published for the first time in 1909 in the report by the Russian Museum of History.

1-4. Four bronze phalerae, round, (D = 5.5 cm, H = 0.6 cm), rendering and embossed human mask in the center and two embossed striated girdles on the side (Fig. 9.10/2-3).

Dating: The first half of 1st century BC.

Ref.: Tallgren 1926, pp. 156-158, figs. 92, 112/4 (Scythian); Cernenko 1968, pp. 50, 88-89, fig. 47 (4th-3rd centuries BC, Scythian); Rikman 1969, p. 33; Simonenko 1982, p. 237, 242-244, fig. 1/5-6 (3rd century BC, Scythian); 1998, p. 164; 1999, pp. 73-76, 88-94; 2000, p. 161 (Sarmatian); Polin 1992, pp. 50-53, 65-66, fig. 9 (2nd-1st centuries BC and even 1st century AD, Geto-Dacian); Nefedova 1993, pp. 15-20 (Sarmatian); Šcukin 1994, p. 98, fig. 33; Shchukin 1995, pp. 211-213, fig. 6 (hesitates in framing it chronologically and ethnically); Arnăuț, Ursu Naniu 2000, pp. 351-362 (the end of 3rd century BC, Scythian); Mordvinceva 2001a, pp. 108-114 (2nd-1st centuries BC); Bârca 2002, p. 104, 105, fig. 7 (the first half of 1st century BC); 2002a; 2004, fig. 14 (the first half of 1st century BC).

4. București-Herestrău (Romania). Hoard. The hoard was a fortuitous discovery made in a sand quarry north of the Herestrău lake in 1938.

1-2. Two gilded silver fibulae-phalerae, one of them fragmentary, attached to bronze fibulae, rendering a bust, most likely of a man (D = 9.3 cm, H = 9 cm). The area around the human face is decorated with lines of incised dots, and the frame consists of a line of protuberances and two circular stripes, one made of lines, plus one made of triangles filled with lines (Fig. 9.11/3; 9.15/3).

Dating: The first half of 1st century BC.

Ref.: Popescu 1948, pp. 35-69; Horedt 1973, Cat. No. 15 (125-75 BC); Glodariu 1974, pp. 64-65, 242, pl. XXXV/1; 1975, pp. 19-27, pl. I/1 (1st century BC); Schnurbein 1986, pp. 420-429, fig. 13; Hachmann 1990, pp. 710-715; Rustoiu 1995, pp. 113-114, fig. 1/1-2; 1997, pp. 45-46, fig. 45/1-2; 2002, p. 126, fig. 85/1-2 (the first half of 1st century BC).

5. Fedulov, Rostov County (Russia). Hoard.

In 1904, the Imperial Archaeological Committee received a number of gold and silver items, known in the literature as the hoard of Fedulov.

1-2. Two gilded silver phalerae, round and with a concave profile, made by hammering and finished with the scraper and punctuator, rendering an embossed lion face, with an almost human expression, with a spear head in its teeth. The rest of the surface is ornamented with phytomorphic motifs (Fig. 9.5/3).

3. Gilded silver phalera, round and with an almost flat profile (D = 10.3 cm, H = 0.8 cm), made by stamping and finished with the scraper and punctuator, rendering the bust of Helios, framed by rays and flanked by the front parts of two horses (Fig.9.5/4).

4. Gilded silver phalera, oval and almost flat in profile (L = 14 cm, l = 7.4 cm, H = 0.56 cm), made by stamping and finished with the scraper, rendering the fight scene between goddess Athens and young giant Alcyoneus (Fig. 9.5/5).

5-8. Four silver phalerae with bronze cores, round and with curved profiles (D = 5.2 cm, H = 0.8 cm), rendering, in a very schematic manner, a rider with the left hand raised (Fig.9.5/2).

Dating: 2nd century BC.

Ref.: Spicyn 1909, pp. 23-24, figs. 42-49; Rostovcev 1914, p. 56, 57; 1925, p. 441; Berhin 1962, pp. 37-39 (the end of 3rd century BC); Zaseckaja 1965, pp. 28-36 (the end of 3rd century BC); Mordvinceva 1996a, pp. 10-11; 2001, p. 36, 63-64, 71-72, pls. 1-3.

6. Galice (Bulgaria). Hoard.

Hoard, a fortuitous discovery in 1918, only 14 phalerae of which were preserved, and two of which have figurative representations: 1. Gilded silver phalera, round and with a curved profile (D = 18.3 cm), made by stamping and finished with the scraper and punctuator, rendering the bust of female character that has a bird (pigeon?) on top of each shoulder, looking towards the character's head. The decoration also includes geometric motifs (dots, lines, semiovoli, ornaments shaped like a lace) (Fig. 13/1; 16/1).

2. Gilded silver phalera, round and with a curved profile (D = 15.5 cm), made by stamping and finished with the scraper and punctuator, rendering in a rider heading left its center and geometric motifs on the sides (points, lines, semiovoli, ornaments shaped like lace) (Fig. 9.13/2; 9.16/2).

Dating: The end of 2nd century BC-the middle of 1st century BC.

Ref.: Fettich 1953, figs. 5-12; Rostovcev 1993, p. 41, pls. 2-3; Rustoiu 2002, p. 126, fig. 84/2-3 (end of 2nd century-middle of 1st century BC).

7. Jakomovo, Mihajlovgrad County (Bulgaria). Hoard.

A rich hoard was found 3 km west of the Jakimovo village in 1972.

1. Gilded silver phalera, round (D = 8 cm), with an embossed bust of a female character, probably winged, with rich clothing, plus bracelets on the right forearm and necklaces around the neck (Fig 13/3).

2. Gilded silver phalera, round (D = 8 cm), with an embossed bust of a bearded male character, wearing necklaces around the neck and a phalera on the right shoulder (Fig. 9.13/4; 9.16/4).

Dating: The first half of/middle of 1st century BC.

Ref.: Milcev 1973, p. 1-14 (the end of 1st century BC); for some types of items in the inventory of this treasure, see I. Glodariu (1975, p. 23), who is not sure the hoard was buried at the end of 1st century BC; Rustoiu 1997, p. 46; 2002, pp. 125-126, fig. 84/1 (the first half/middle of 1st century BC).

8. Jancokrak, Zaporozh'e County (Ukraine). Hoard

In 1906, close to the Jancokrak village (former Melitopol' county), on the lower Konki river, that flows into the Dnepr, several items, most of them made of gilded silver, thought to be from a hoard, were found under unknown circumstances. Most of the items were flattened and had withstood serious deformation.

1. Gilded silver phalera, round and with a round profile (D = 17.65 cm, H = 4.4 cm), made by stamping and finished with the scraper and punctuator. The decoration in the center displays a winged female character, probably a goddess, with three necklaces around the neck, a phiala in the right hand and another item in the left hand, plus a bird, probably a hawk, next to the left shoulder, plus other geometric and phytomorphic motifs (dots, circles, zigzagging lines, semiovoli, ornaments shaped like a lace (Fig. 9.6/4).

2. Gilded silver phalera, round and with a concave profile (D = 13.7 cm, H = 3.7 cm), made by stamping and finished with the scraper and punctuator. The decoration is a sphinx in a solemn position, with an oval shield in front of it, plus geometric and phytomorphic motifs (dots, zigzagging lines, semiovoli, ornaments shaped like a lace) (Fig. 9.6/5).

Dating: 1st century BC.

Ref.: Spicyn 1909, p. 28, figs. 80 & 81; Guščina 1969, pp. 41-53 (1st century BC); Smirnov 1984, p. 104, fig. 48 (the end of 2nd century BC-1st century BC); Simonenko 1994, p. 112, fig. 10 (the end of 2nd century-1st century BC); Mordvinceva 1996a, pp. 13-14, 20; 1997, pp. 106-115; 2001, p. 37, 64, 79-80, pls. 37-41 (the end of 2nd century BC-1st century BC).

9. Klimenkovka, Voronež County (Russia). Hoard

Near the village of Klimenkovka, south of the Voronež, close to the Adjar River, which flows into the Northern Donetsk, one set of items was found whose origin remains a mystery.

1-4. Four small silver phalerae, round and with a curved profile (D = 5.4 cm, H = 0.7 cm), made by stamping and finished with the scraper and punctuator. They each represent two winged gryphons facing each other (Fig. 9.8/3).

Dating: 2nd century BC.

Ref.: Jacenko 1962, pp. 42-50 (2nd century BC); Simonenko 1982, p. 240, 241, 243, fig. 3, 3/14 (the first half of 2nd century BC); 1999, pp. 73-76, fig. 1/2 (Sarmatian); Smirnov 1984, pp. 80-84, fig. 35-36 (2nd century BC); Polin 1992, p. 60, fig. 11/24-31; Mordvinceva 2001, p. 74, pl. 11 (2nd century BC).

10. Korenovsk, Krasnodar County (Russia). Hoard.

Two phalerae were found in a situla in the mound of a destroyed tomb in 1967.

1. Fragmentary gilded silver phalera, round with an *umbo* profile (D = 15 cm, H = 5.5 cm), made by stamping and finished with the scraper and punctuator. The decoration consists of the head of a man, with moustache and beard, in the center, and geometric and phytomorphic motifs on the sides (Fig. 7/4).

2. Gilded silver phalera, round with an *umbo* profile (D = 15 cm, H = 5.5 cm), made by stamping and finished with the scraper and punctuator. The center decoration is a slightly embossed female head and geometric and phytomorphic motifs on the sides (Fig. 9.7/5).

Dating: 1st century BC.

Ref.: Anfimov 1987, pp. 198-199; Marcenko 1996a, pp. 37-38, 79-80 (the first half of 1st century BC); Mordvinceva 2001, p. 37, 64, 79, pls. 35-36 (1st century BC).

11. Krivaja Luka, Astrahan County (Russia). Tomb.

Items found in Tumulus 1, Tomb 17, of the necropolis of Krivaja Luka IX in 1974.

1-2. Two gilded silver phalerae, round and with curved profiles (D = 16 cm, H-3.2 cm), made by hammering from the inside and finished with the scraper and punctuator on the outside, which show a speeding rider. On one item, the rider is galloping to the left, with a spear in its the left hand, while the field is ornamented with six solar symbols, three of which are shaped like a star with eight beams in circle, and the other three without the circle. On the other item, the rider is going to the right, with the spear in his right hand, and six rosettes, each with eight petals, are around him. On the inside margins, the phalerae each have three bronze ears attached with silver rivets (Fig. 9.7/1-2).

Dating: The end of 2nd century BC-first half of a 1st century BC.

Ref.: Dvornicenko, Fedorov-Davydov 1981, pp. 100-105 (the end of 2nd century BC-the first half of 1st century BC); Mordvinceva 2001, 37, 64, 76, pl. 19 (the end of 2nd century BC-the beginning of 1st century BC).

12. Lupu, Alba County (Romania). Hoard.

The hoard was found under a stone slate, at the depth of 1.80m, in a bronze mug, when the village's new cemetery attempted to dig a grave.

1-2. Two silver phalerae, made by hammering (D = 10.6 cm and 11.1cm), show a hawk with a snake in its claws, and the head of the ophidian points to the bird's beak in a round frame of pearls. On the first phalera, the hawk has its wings raised to the right; they are to the left on the other. Both have holes for being attached, but the rivets were not preserved (Fig. 9.12/1-2; 9.15/2-3).

3-4. Two silver phalerae (D = 11.2 cm and 13.1 cm), made by the same technique, display, also in a frame of pearls (one items also has a lace doubled here and there by pearls), a rider galloping to the left, in a solemn attitude, with itsright arm raised and the palm upwards. The left hand, hanging down, is holding a shield (Fig. 9.12/3-4; 9.14/5,7).

5-7. Three silver phalerae (D = 10.5 cm, 14.8 cm and 16.1 cm), made in the same technique, render a female character, framed by pearls arranged in a circle. Their clothes are attached with large "ceremonial" fibulae (this sort of fibulae were found in the treasure-Fig. 9.14/1). One item shows the character holding in its hand, raised from the elbow, an ophidian, while the left hand, hanging down from the elbow, holds a mammal (Fig. 9.12/6; 9.14/4). The second item, similar to the first, the character holds

a mug in its left hand (Fig. 9.12/7; 9.14/6), while on the third item, the winged character has two mammals placed vertically next to its hands hanging down from the elbow (Fig. 9.12/5; 9.14/8). Based on the solemn attitude of the characters, as well as the look of the animals, the phalerae probably show a female deity as “master of animals”

The phalerae in this hoard, entirely recuperated, display the most valuable and complete imagery known so far from the Geto-Dacian mythology from the time of the Kingdom.

Dating: The first half of 1st century BC.

Ref.: Glodariu, Moga 1994, pp. 33-48; 1997, pp. 585-596 (1st century BC); Rustoiu 1997, pp. 32-33, 84-85, fig. 17, 74 (the first half of 1st century BC); 2002, p. 123, figs. 81-83 (the end of 2nd century-the first half of 1st century BC).

13. Novodžerelievskaja, Krasnodar County (Russia). Tomb.

The tomb was found and researched by N. V. Anfimov in 1974.

1-2. Two silver phalerae, round and with concave profiles (D = 6.1 cm, H = 0.8 cm), made by stamping and finished with the scraper and punctuator, display in different manners the rear side of a porcupine (Fig. 9.6/1-2).

Dating: The first half of 1st century BC.

Ref.: Anfimov 1986, pp. 183-190; 1987, p. 202 (the second half of 2nd century BC); Kostenko 1978, p. 80; Smirnov 1984, p. 110 (2nd century BC); Marcenko 1987, pp. 49-50; 1996, p. 78 (the beginning of 1st century BC); Mordvinceva 2001, p. 80, pl. 41/77, 42/78 (the first half of 1st century BC).

14. Novouzensk., Saratov County (Russia). Hoard.

In 1884, several silver items were found in the mound of a small tumulus close to the city of Novouzensk.

1-2. Two gilded silver phalerae, round and with concave profiles (D = 24 cm, H = 0.5 cm), finished with the scraper and punctuator, each display a gryphon wreathed almost in a circle (Fig. 9.8/5).

Dating: The end of 2nd century BC-the first half of 1st century BC.

Ref.: Spicyn 1909, p. 29, figs. 72-73, 79; Trever 1940, pp. 48-50, pls. 3-5 (the last third of 2nd century BC); Mordvinceva 2001, p. 11, 36-37, 64, 75, pl. 14 (the end of 2nd century-1st century BC).

15. Rogovskaja, Krasnodar County (Russia). Fortuitous finding.

1. Gilded silver phalera, round, showing Helios.

Dating: The end of 2nd century BC-the first half of 1st century BC.

Ref.: Simonenko 2001, pp. 256-257.

16. Seversk, Krasnodar County (Russia). Tomb.

In 1881, in a tumulus, the Kazakhs found a rich Sarmatian tomb, and its inventory ended up in the Moscow Museum of History. The next year, V. I. Sizov excavated the tumulus and found more items from its inventory.

1. Gold phalera, round and with a slightly curved profile (D = 14.3 cm, H = 1.1 cm), with an elaborate embossed rendering of the victory of goddesses Athens and Dionysos over the giants. The field also includes vegetal and geometric motifs (Fig. 9.9/3).

2-4. Three gold phalerae, round and with curved profiles (D = 3.7 cm, H = 0.62 cm), finished with the scraper and punctuator, rendering a twisted gryphon, with large ears, thick tail, paws pushed a great deal in the front, and dot-filled triangles on the side (Fig. 9.9/2).

Dating: The second half of 2nd century BC-the beginning of 1st century BC.

Ref.: Spicyn 1909, pp. 24-26, figs. 39 & 41; Smirnov 1953, p. 37 (the second half of 2nd century BC); Rostovcev 1925, pp. 554-555; 1993, p. 42, 43, pl. 4/2 (the end of 2nd century BC); Mordvinceva 2001, pp. 76-77, pl. 21 (the second half of 2nd century BC).

17. Stara Zagora (Bulgaria). Tomb.

Three phalerae made of gilded silver and decorated with phytomorphic, geometric, zoomorphic and anthropomorphic motifs were unveiled in a tomb.

1-3. Circular phalerae, cast in bronze, showing scenes close to the Greek-Oriental style, including the fight between gryphons, sphinxes and felines, a feline (?) attacking a deer (Fig. 13/6). One also portrays Hercules killing the lion, a well-known theme in the Greek mythology (Fig. 9.13/5)

Dating: 1st century BC.

Ref.: Schnurbein 1986, pp. 409-420; Hachmann 1991, pp. 682-715 (1st century BC).

18. Starobel'sk, Lugansk County (Ukraine). Hoard. Some 200 silver and gilded silver items, currently at the Hermitage Museum, were fortuitously found on the bottom of a ravine in 1882. They are thought to make up the rich inventory of a Sarmatian rider.

1. Gilded silver phalera, round with an *umbo* profile, made by stamping and finished with the scraper and punctuator (D = 15.5 cm, H = 8.8 cm). The decoration renders in a circular manner, head-to-head and aggressive, a lion and a bull, then a wild boar and a feline (tiger?), as well as flowing waves, dots and lines (Fig. 9.9/1a-d).

Dating: The second half of 2nd century-the beginning of 1st century BC.

Ref.: Spicyn 1909, pp. 27-28, figs. 58-68; Guščina 1969, p. 49, 51 (2nd century-the beginning of 1st century BC); Smirnov 1984, p. 86, fig. 39 (2nd century-the beginning of 1st century BC); Simonenko 1994, p. 106, fig. 3 (2nd century-the beginning of 1st century BC); Mordvinceva 1996a, p. 14; 2001, p. 37, 64, 77-78, pls. 26-30 (the first half of 2nd century BC).

19. Sercea, Covasna County (Romania). Hoard.

The hoard was found in 1934, when a house foundation was being dug.

1. Gilded silver phalera, oval and with a curved profile (L = 11.3 cm, l = 7.1 cm), made by stamping and finished with the scraper and punctuator. The decoration consists of a rider going to the right, holding the reins in the left hand and a long sword

in the right. The solemn rider is in armor and wearing a helmet, with a hawk on top of it. Under the horse, showed in a solemn trot, with the left foot up, is a dog (Fig. 9.11/1; 9.15/1) It could be a fighting scene, a trial for the aristocrats aspiring to high ranks.

2. Gilded silver phalera, round and with a curved profile (D = 5.7 cm), made by stamping and finished with the scraper and punctuator, rendering a gryphon, a motif of obvious Oriental origin. The sides of both phalerae are ornamented with incised semiovoli (Fig. 9.11/2; 9.15/2).

Dating: The first half of 1st century BC.

Ref.: Fettich 1953, pp. 134-144; Glodariu 1974, pp. 64-65; 1975, pp. 21-27; Mărghitani 1976, pp. 54-55; Crisan 2000, p. 74, 142-143, pl. 124 (2nd-1st centuries BC); Rustoiu 2002, p. 125, fig. 84/2-3 (the end of 2nd century-the first half of 1st century BC).

20. **Taganrog**, Rostov County (Russia). Hoard.

A rich hoard was found close to the river Don's mouth in 1897, when a field was being plowed.

1. Fragmentary gilded silver phalera (D = 16.6 cm, H = 4.2 cm), made by stamping and finished with the scraper and punctuator, shows Dionysus standing on the right hand side of a panther. There are also geometric motifs in the shape of a lace, dots, lines etc. (Fig. 9.10/5)

2. Gilded silver phalera round and with a concave profile (D = 12.6 cm), made by stamping and finished with the scraper and punctuator, rendering the front part of a horse in motion, plus geometric motifs in the shape of a lace, dots, zigzagging lines etc. (Fig. 9.10/5)

Dating: The end of 2nd century-probably first half of 1st century BC).

Ref.: Spicyn 1909, p. 27, figs. 51-57; Trever 1940, p. 34, 38 (the end of 3rd century-2nd century BC); Abramova 1961, p. 96 (2nd century BC); Smirnov 1984, pp. 74-75, fig. 29 (2nd century BC); Mordvinceva 1996a, pp. 13-14; 2001, p. 37, 64, 77, pls. 22-25 (the end of 2nd century-1st century BC).

21. **Tvardica**, Taraclia County (Rep. of Moldavia). Hoard.

Two silver phalerae found near the village of Tvardica were brought in at the Institute of Archaeology and Ethnography in Chişinău. Further research found that the phalerae were from a rectangular pit, about 40 meters away from a tumulus, where new treasure items were also found.

1. Silver phalera round and with a conic (*umbo* type) profile (D = 15.9 cm, H = 7.8 cm), made by stamping and finished with the scraper and punctuator, showing a deer and a gryphon, then two felines, all in motion and all separated by vegetal motifs. There are also geometric and vegetal motifs, the flowing wave (Fig. 9.6/3).

Dating: The first half of 1st century BC.

Ref.: Information S. Agul'nikov; also see Šcukin 1994, fig. 51a-b; Mordvinceva 1996a, pp. 13-14; 2001, p. 37, 64, 80-81, pl. 43/79-80 (the first half of 2nd century a. Ch); Bârca 2002, p. 104, 105, figs. 5-6; 2004, figs. 15-16 (the first half of 1st century BC).

22. Uspenskaya, Krasnodar County (Russia). Fortuitous discovery.

The digging for a hut in 1888 led to the discovery of three phalerae made of gilded silver.

1. Gilded silver phalera, round and with a curved profile, made by stamping and with a scraper, displays an embossed aggressive front section of a bull, with a sun symbol on the forehead (Fig. 8/4).

Dating: The end of 3rd century-2nd century BC.

Ref.: Spicyn 1909, p. 53, fig. 77-78; Mordvinceva 1996a, pp. 10-11; 2001, pp. 63-64, 71-72, pl. 4 (the second half of 3rd century BC); 2001b, p. 162.

23. Vasjurina Gora, Krasnodar County (Russia). Tombs.

In 1869-1870, N. I. Veselovskij found ten phalerae in Tumulus no. 2 and another seven in Tumulus no. 1.

1. Silver phalera, round and with a slightly concave profile (D = 7 cm, 1.2 cm), made by stamping and showing an embossed head of a female character (Fig. 9.7/3).

Dating: 2nd century BC-the beginning of 1st century BC.

Ref.: Rostovcev 1913-1914, p. 42, 55, pls. 18 & 24 (the second half of 3rd century-the beginning of 2nd century BC); Mordvinceva 2001, pp. 36-37, 63-64, 73, pl. 9.

24. Velikoploskoe, Odessa County (Ukraine). Hoard.

In 1964 several items deposited in a bronze cauldron were discovered while a field was being plowed.

1. Bronze phalera, made by stamping and hammering from the inside, round and with a curved profile (D = 4.2 cm), showing an embossed human mask.

Dating: The first half of 1st century BC.

Ref.: Dzis-Rajko, Sunicuk 1984, pp. 148-161 (the end of 3rd century BC, Scythian); Simonenko 1982, p. 237, 242, fig. 1/9-10 (3rd century BC, Scythian); 1999, pp. 73-76, fig. 1/2 (Sarmatian); Polin 1992, pp. 53-55, fig. 10 (2nd-1st centuries BC, emphasis on 1st century BC); Grosu 1995, p. 167, figs. 23 & 24 (3rd-2nd centuries BC, Sarmatian); Bârca 2002, p. 104, 105, figs. 3-4; 2004, figs. 11-12 (the first half of 1st century BC).

25. Verhnij, Krasnodar County (Russia). Tomb. Several phalerae were found in Tumulus no.4, Tomb no.2 in 1978.

1. Gilded silver phalera, oval and with an almost flat profile (L = 11.7 cm, l = 6.4 cm, H = 0.2 cm), made by stamping and finished with the scraper and punctuator, rendering an embossed goddess Nike (Fig. 9.8/2).

2. Gilded silver phalera, round and with an almost flat profile (D = 7.6 cm, H = 0.3 cm), made by stamping and finished with the scraper and punctuator, rendering an embossed Medusa head, surrounded by snakes (Fig. 9.8/1).

Dating: 2nd century BC.

Ref.: Marcenko 1996, p. 78-79, fig. 58/1-4 (the second quarter of 3rd century-the first quarter of 2nd century BC); Mordvinceva 2001, p. 36, 63-64, 72, pl. 5 (3rd-2nd centuries BC).

26. Volodarka, Ural County (Kazakhstan). Tomb.

In 1981, G. A. Kušäeva found these items in Tumulus no.4, Tomb. No. 1.

1-2. Two gilded silver phalerae, round and with concave profiles (D = 24.6 cm, H = 3.6 cm), finished with the scraper and punctuator. Both of them display the same representation from Greek mythology, but oriented differently, heraldic-wise: the hero Bellerophon, riding his horse Pegasus, kills Chimera, a fantastic, composite animal-body of a lion and tail of a snake, plus the head of a he-goat on the lion's back (there are differences in the manner of rendering the scene of the and character on the two items) (Fig. 9.4/4-5).

Dating: 2nd century BC.

Ref.: Mordvinceva 1996c, pp. 148-156; 2001, p. 75, pls. 16-17 (2nd century BC).

27. Voronežskaja, Krasnodar County (Russia). Tomb.

Two phalerae in the History Museum in Krasnodar make up an accidental discovery in a tumulus with several tombs, west of the city.

1-2. Two silver phalerae, round and with curved profiles (D = 14 cm, H = 1.5 cm), made by stamping and finished with the scraper and punctuator, each display a panther wreathed in a circle, but oriented differently heraldic-wise (Fig. 9.3/4-5).

Dating: The second half of 1st century BC.

Ref.: Anfimov 1952, pp. 78-83, fig. 22/1-2; 1987, p. 208; Mordvinceva 2001, p. 81, pl. 46 (1st century BC-1st century AD).

28. Žutovo, Volgograd County (Russia). Tomb.

Eight gilded silver phalerae and an *umbo* were the fortuitous discovery in the mound of Tumulus no.27, Tomb no.4. V. P. Šilov excavated the tumulus in 1964.

1-2. Two gilded silver phalerae, made by casting, having in the center a semi-sphere protuberance, with a round orifice, in which an orange carnelian stone was welded with the help of a silver drop. Twisted around it in a circle is the image of a he-goat (Fig. 9.5/1).

Dating: The end of 2nd century-1st century BC.

Ref.: Šilov 1975, p. 139-140; Smirnov 1984, p. 112 (3rd-2nd centuries BC); Mordvinceva 1994, pp. 96-100; 2001, p. 37, 64, 76, pl. 20; 2001b, p. 164 (the end of 2nd century-the beginning of 1st century BC).

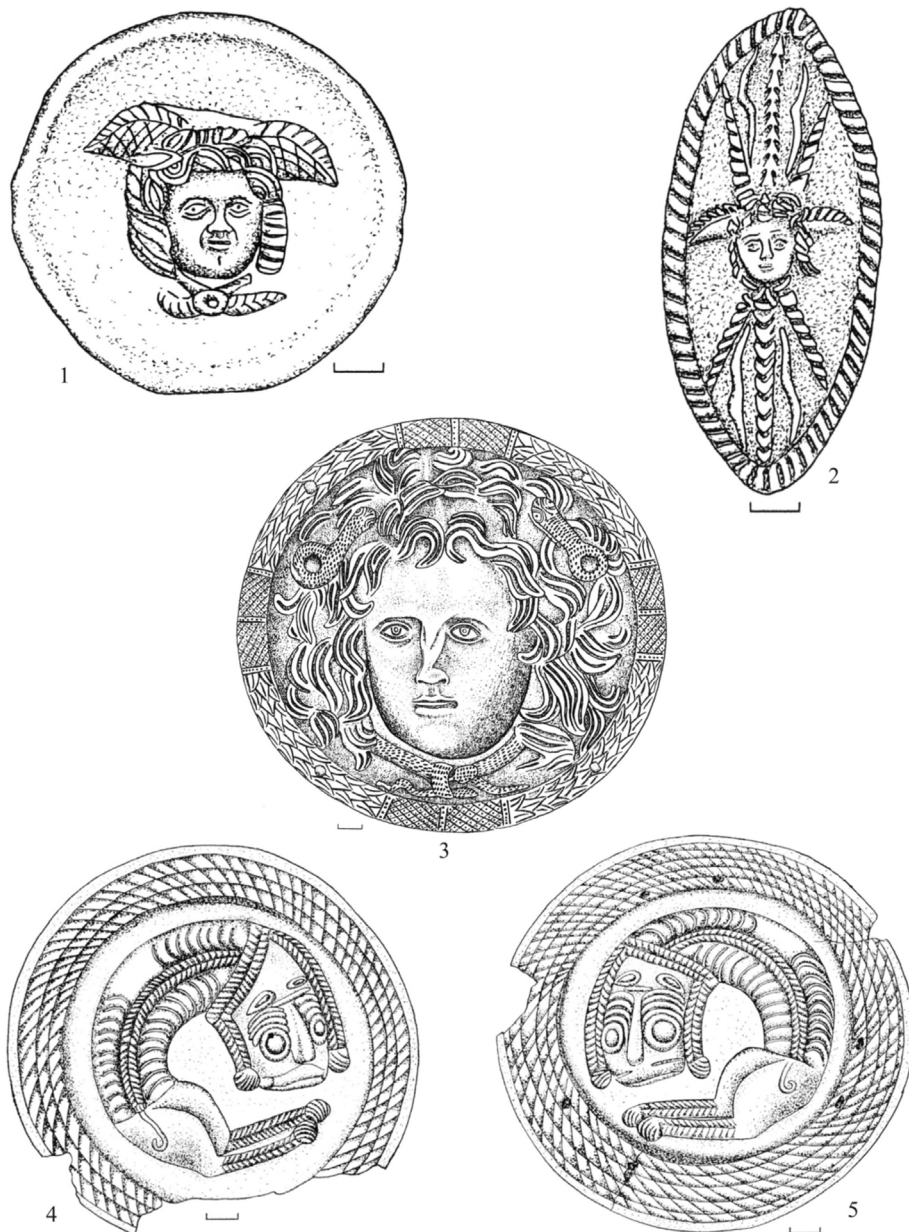


Figure 9.3: 1-3 Ahtanizovskaja, 4-5 Voronežskaja (after Spicyn 1909; Mordvinceva 2001).

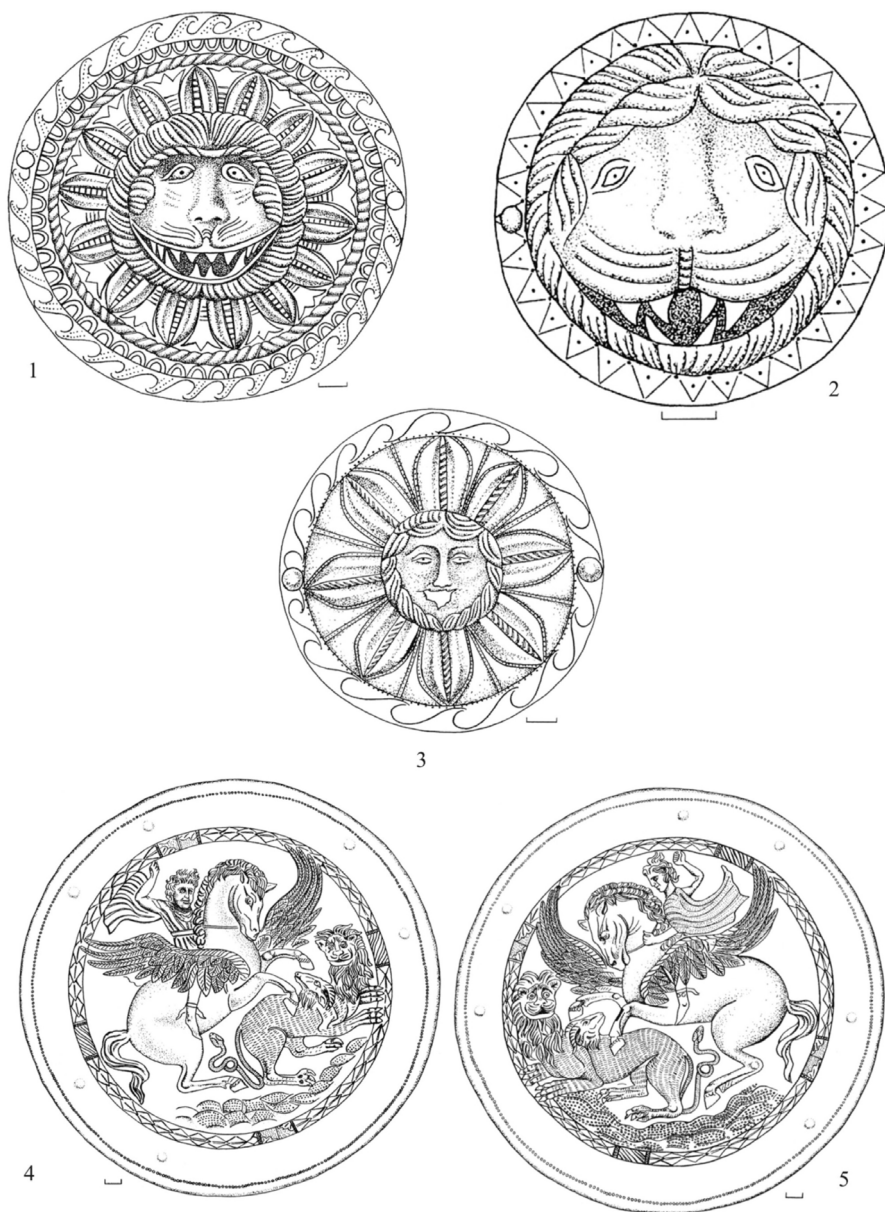


Figure 9.4: 1-3 Balakleja, 4-5 Volodarka (after Smirnov 1984; Mordvinceva 1996c, 2001).



Figure 9.5: 1 Žutovo, 2-5 Fedulov (after Zaseckaja 1965; Mordvinceva 1994, 2001).

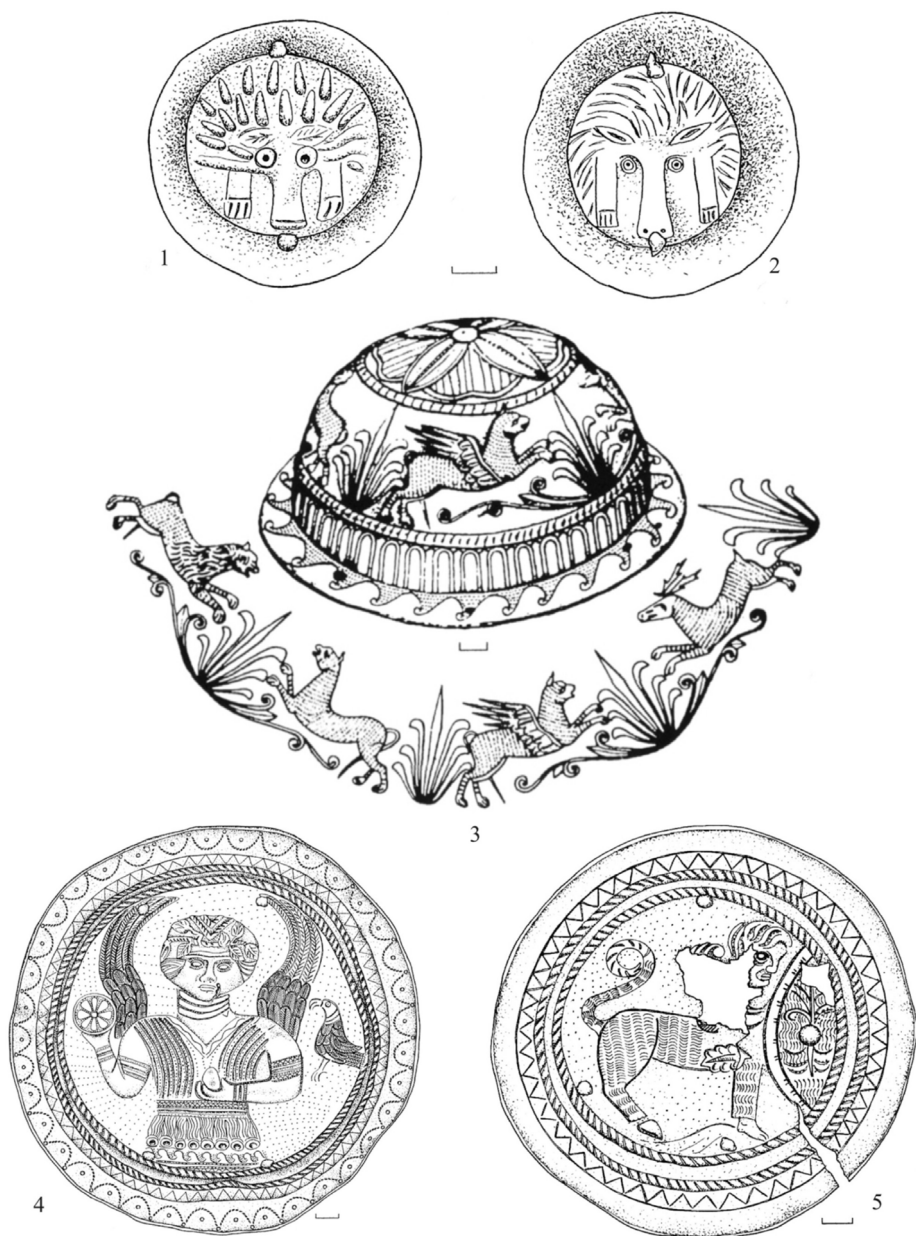


Figure 9.6: 1-2 Novodžerelievskaja, 3 Tvardica, 4-5 Jancokrak (after Mordvinceva 1997, 2001; Šcukin 1994).



Figure 9.7: 1-2. Krivaja Luka, 3 Vasjurina Gora, 4-5 Korenovsk (after Dvornichenko, Fedorov-Davydov 1981, Mordvinceva 2001).



Figure 9.8: 1-2 Verhnij, 3 Klimenkovka, 4 Uspenskaja, 5 Novouzensk (after Marcenko 1996; Spicyn 1909; Jacenko 1962, Mordvinceva 2001).

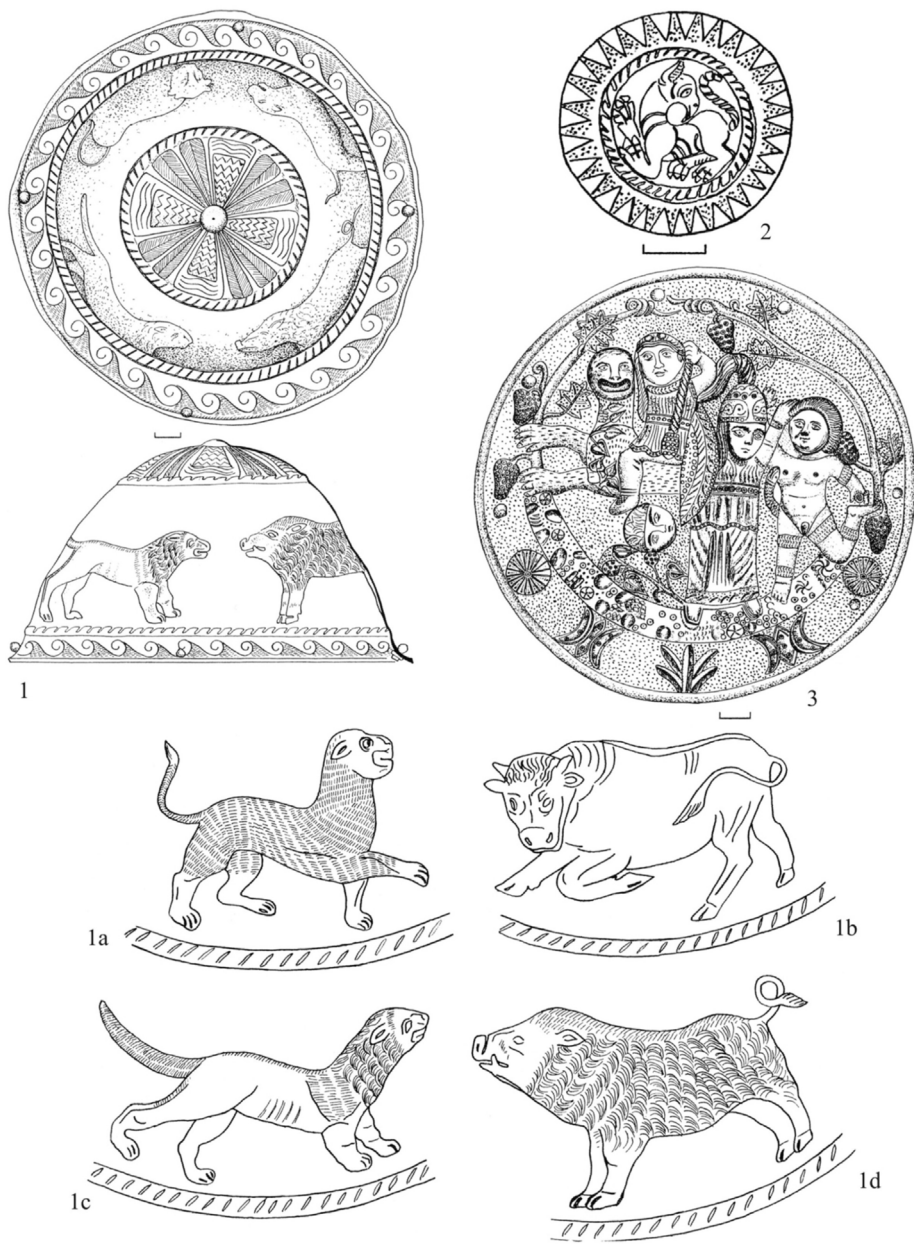


Figure 9.9: 1 Starobel'sk, 2-3 Seversk (after Mordvinceva 2001; Rostovzeff 1922).



Figure 9.10: 1 The Siberian Collection of Peter the First, 2-3 Bubueci, 4,6 Vozdviženskaja 5-7 Taganrog (after Spicyn 1909; Mordvinceva 2001, 2001a).

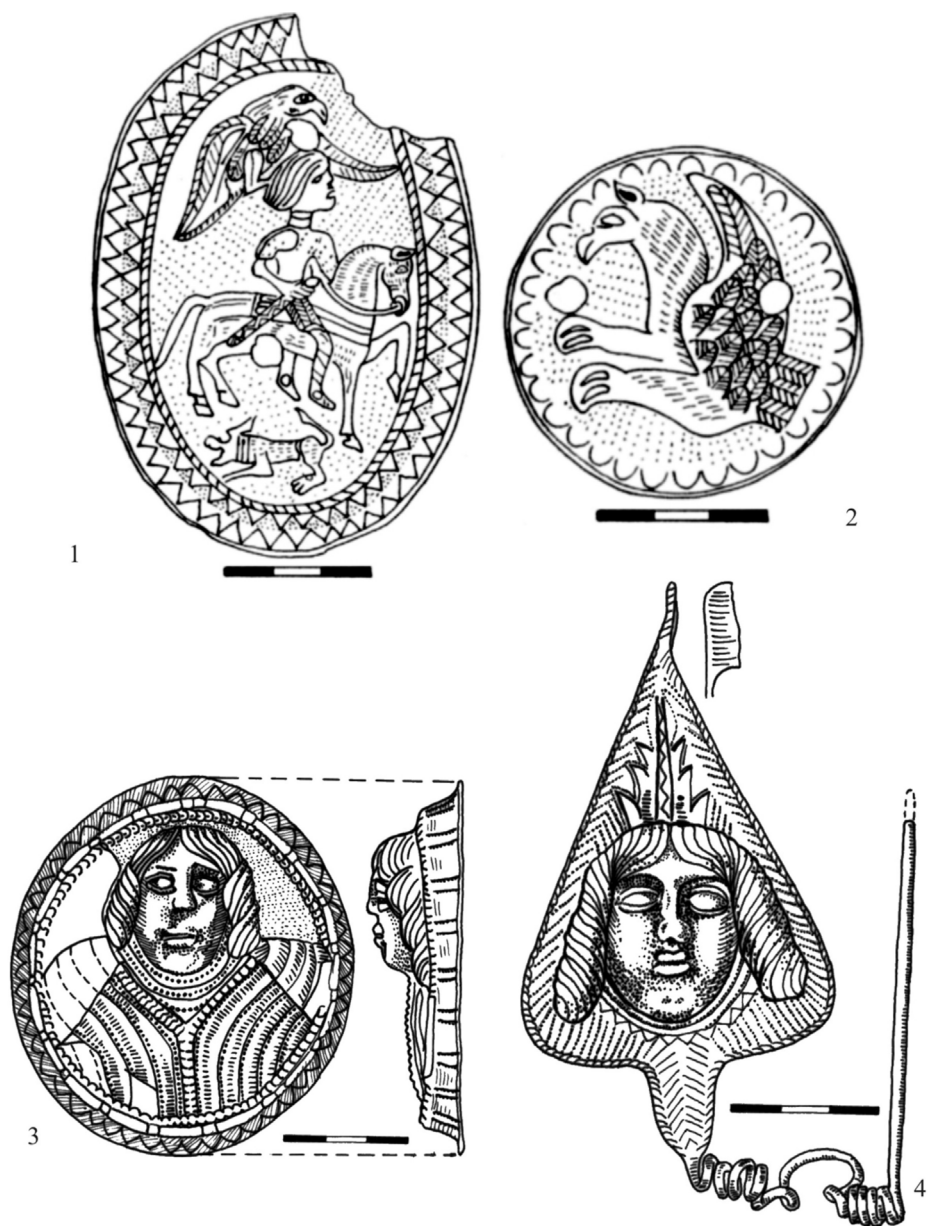


Figure 9.11: 1-2 Surcea, 3 București-Herestrău, 4 Coda Malului (after Fettich 1953, Mărghită 1976).



Figure 9.12: Lupu (after Glodariu, Moga 1994).



Figure 9.13: 1-2 Galice, 3-4 Jakimovo, 5-6 Stara Zagora (after Nikolov 1988; Milcev 1973; Schnurbein 1986).

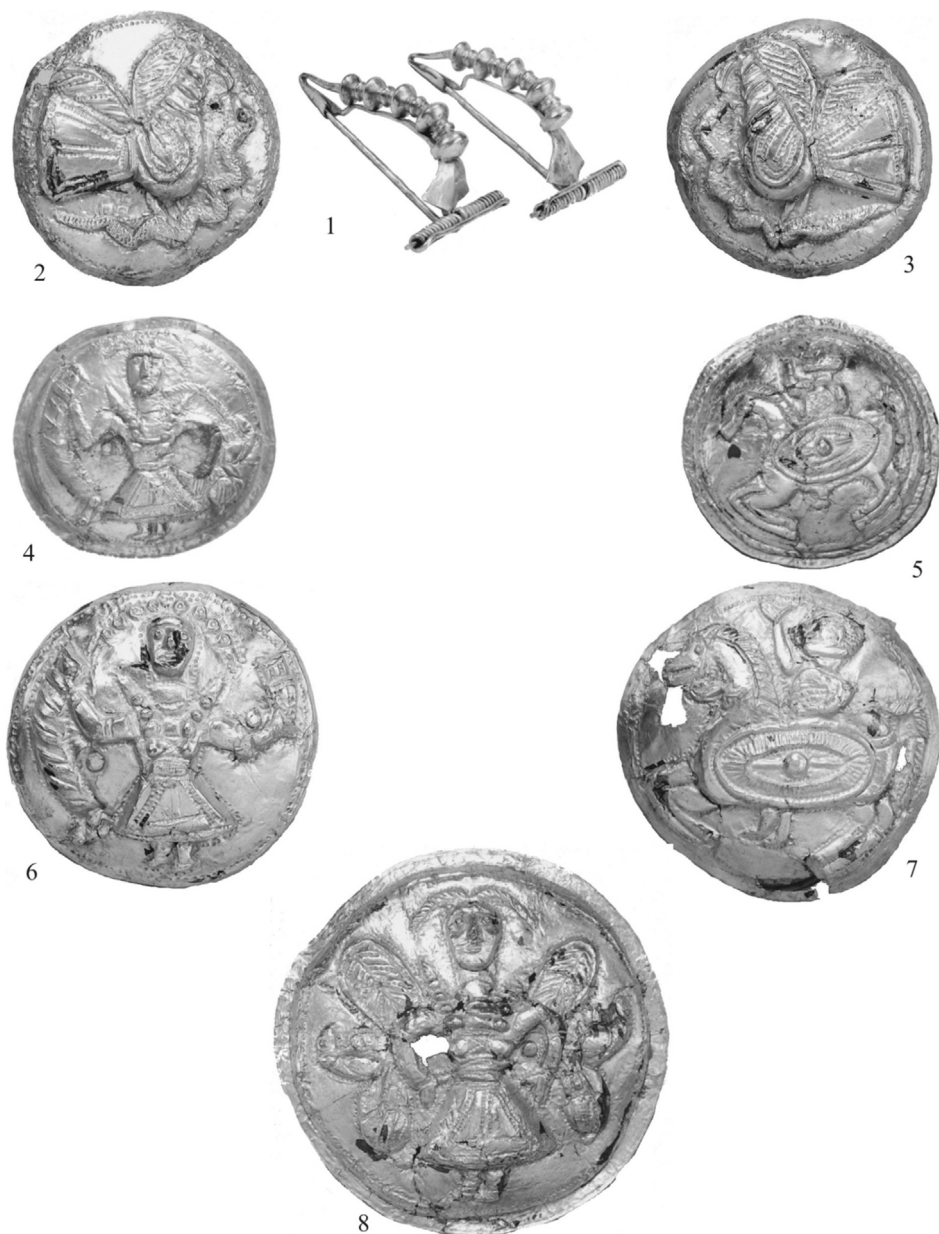


Figure 9.14: Lupu (after Glodariu, Moga 1997; I Daci 1997).



Figure 9.15: 1-2 Surcea, 3 București-Herestrău, 4-5 Coda Malului.

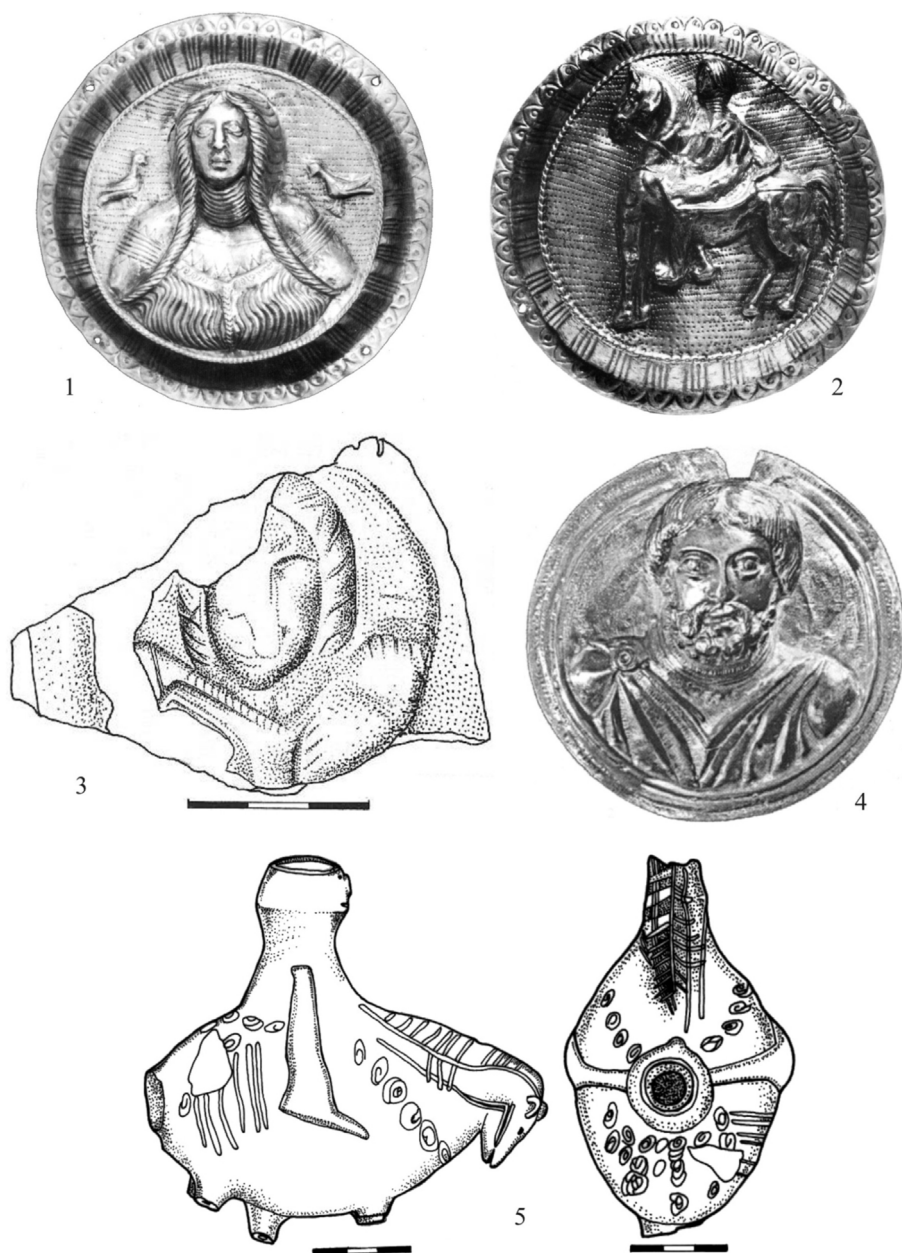


Figure 9.16: 1-2 Galice, 3 Cărlomănești, 4 Jakimovo, 5 Răcătău (after Venedikov 1996, Sîrbu 2004).

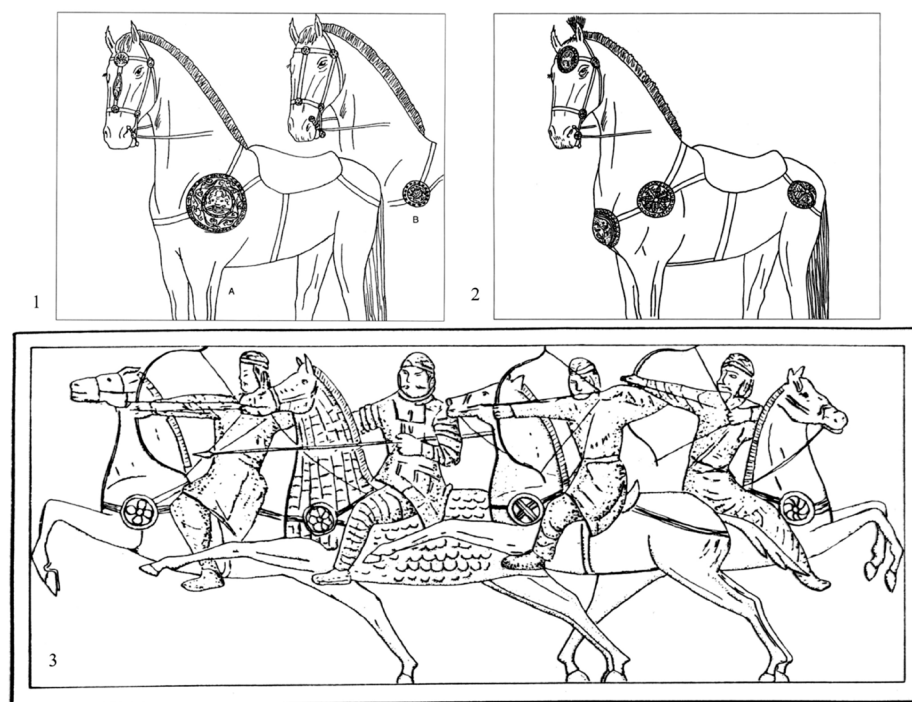


Figure 9.17: 1-2 Position of the phalerae in the harness (after Zaseckaja 1965; Mordvinceva 2001), 3 the representation on the Halcajan Palace relief (after Pugacenkova 1971).

Abbreviations

ActaArchHung = Acta Archaeologica Academiae Scientiarum

Hungaricae, Budapest

Antiquity = Antiquity, Oxford

Apulum = Apulum. Buletinul Muzeului Unirii Alba Iulia, Alba Iulia

Arheologija (Kiev) = Arheologija, Kiev, Institut Arheologii, Kiev

Arheologija (Sofia) = Arheologija, Sofija, Organ na Arheologiceskija Institut I Muzej pri B'lgarskata Akademija na Naukite

ArhMold = Arheologia Moldovei, Iași

ASGE = Arheologiceskij sbornik Gosudarstvennogo Ermitaja, Leningrad

BerRGK = Bericht der Römisch-Germanischen Kommission des Deutschen Archäologischen Institutes, Frankfurt am Main

Dacia = Dacia. Recherches et découvertes archéologiques en Roumanie, București, I-XII (1924-1928); Nouvelle Série: Revue d'archéologie et d'histoire ancienne, București

Eurasia Antiqua = Eurasia Antiqua. Deutsche Archäologisches Institut, Berlin

EphemNap = Ephemeris Napocensis, Institutul de Arheologie si Istoria Artei, Cluj-Napoca

ESA = Eurasia Septentrionalis Antiqua, Helsinki

Germania = Germania. Anzeiger der Römische-Germanischen Kommission, Frankfurt am Main

IAE al AS = Institutul de Arheologie și Etnografieal Academiei de Științe din Republica Moldova

IAK = Izvestija archeologiceskoj Kommissij, Kiev

Istros = Istros. Buletinul Muzeului Brăilei, Brăila

JahrbRGZM = Jahrbuh des Römisch Germanischen Zentralmuseums zu Mainz, Mainz

KSIA = Kratkie Soobščenija Instituta Arheologii, Moskva

KSIIIMK = Kratkie Soobščenija Instituta istorii material noj kul'tury AN SSSR, Moskva-Leningrad

Muzeul National = Muzeul Național de Istorie, București

PAV = Petersburgskij Arheologiceskij Vestnik, Sankt Petersburg

PFB = Prähistorische Bronzefunde. Institut für Vorgeschichte der Universität, Frankfurt am Main

RA = Rossijskaja Arheologija, Moskva

SA = Sovetskaja Arheologija, Moskva

SAA = Studia Antiqua et Archaeologica, Iasi

SAI = Svod Arheologiceskih Istochnikov, Moskva

Sargetia = Sargetia. Acta Musei Devensis, Deva

SCIVA = Studii și cercetări de istorie veche și arheologie, București

SGE = Soobščenija Gosudarstvennogo Ermitaja, Leningrad

Starini = Starini, Sofia

Stratum = Stratum, Sankt-Peterburg-Kišinev

Thraco-Dacica = Thraco-Dacica, Institutul Român de Tracologie, București

Tr. GIM = Trudy Gosudarstvennogo Istoriceskogo Muzeja, Moskva

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